By the same Author

New Education & Its Aspects

A Handbook of
English Pronunciation

SOME
GREAT EDUCATORS
OF THE WORLD

[A Critical and Comparative Study of the Doctrines of Some Reformers of Education in India and the West]

By
K. K. MOOKERJEE
Professor & Head of the Department of Education
and Dean of the Faculty of Education
University of Calcutta

DAS GUPTA & CO., PVT. LTD.
54/3, College Street
CALCUTTA 12

Published by
N. Mukherjee
'Mookerjee Lodge'
20, Dr. Kartick Bose Street
Calcutta 9

To be had of
INDIAN BOOK DISTRIBUTING CO.
65/2, Mahatma Gandhi Road
Calcutta 9

Printed by
Phanibhusan Roy
Prabartak Printing & Halftone Ltd.
52/3, Bepinbehari Ganguly Street
Calcutta 12

Rupees Fifteen Only

Foreword

There is a beautiful Bengali saying: *'Ratane Ratan Chene'*—"Only a gem can know a gem". Another great Sanskrit saying bears the same meaning, though from a higher plane: *'Devah Bhutva Devam Yajet'*—"One should worship the Divine Being by becoming divine".

Such wise sayings imply a fundamental truth, *viz.*, "Like knows like". That is, if you want to know anything or anyone well, you will have to elevate yourself to the level of that object or the individual; you will have to become one with that object or individual; and, then and then only can you grasp that object or individual well; then and then alone can you realize really and fully the inner glory and grandeur, purity and perfection, beauty and bliss of that object or individual.

Fortunately, such cryptic, yet comely, sayings have not remained mere empty maxims, mere useless theories, for us. On the contrary, we find a most enchanting example of the same in the benign personality of our beloved and revered Professor K. K. Mookerjee, Head of the Department of Education, and Dean of the Faculty of Education, University of Calcutta. Himself a well-known educationist and educator of long standing repute, he has very wisely, very kindly, very lovingly chosen a great and a highly beneficial and useful subject, after his heart, *viz.*, *"Great Educators"*,—a most thrilling, yet an equally instructive one. Himself a life-long educator of great fame and distinction, he has selected and dealt with the educators well, presenting before us in a scholarly, yet intelligible manner, the exhilarating and exalting views of some world-educators of immortal fame, who kindled the *Light of Knowledge,* with their own inner, divine light, in those depressing days of 'encircling gloom' all around.

That light, that Eternal Light, is still wanted, wanted most urgently in these days of educational reforms and academic unrest all over the world.

So our heartfelt thanks go to revered Professor K. K. Mookerjee for his pioneer and most painstaking work. Equally rich in form and matter, thought and expression, it will go a great way in removing a long-felt want in the holy sphere of Education, *viz.,* that of a complete volume, devoted to the study of world-educators only.

May our beloved and respected friend Professor Mookerjee live long, serving devotedly the noble cause of Education, for many years to come.

May the blessings of the Divine Mother be showered on him for ever and for ever and fill his holy life with perfect peace and bliss !

Om Santi.

The 9th August,
1972

ROMA CHAUDHURI,
M.A., D. PHIL. (OXON.)
Vice-Chancellor
Rabindra Bharati
Calcutta

Introduction

Professor K. K. Mookerjee, with his thirty-eight years of experience in the field of education and of teacher training, has traced, in the pages that follow, the philosophy, the spirit, and the specific contribution of nine Western and five Indian educational thinkers and reformers. The strengths and weaknesses of each 'Great Educator', the areas of agreement and of difference between them have been examined with an open and unbiased mind. This study will be welcomed by graduate and post-graduate students of Education, who wish to have an introduction to 'Great Educators' in clear, simple style, free from jargon, and written with an enthusiasm that is infectious.

One can only wish that our young Teachers will draw inspiration, courage and hope from these 'Great Educators', especially our own Indian pioneers, for the superhuman task that faces them in the service of our youth.

J. A. D'Souza, S.J.
Rector
St. Xavier's College
Calcutta

The 7th August,
1972

Author's Preface

History may be compared to a current, the flow of which is *continuous.* The previous thought-currents wield a profound influence upon the later ideas and views, and this is particularly true of the educational theories and practices. As for instance, the readers are expected to have a better grasp and understanding of the doctrines of Jean Jacques Rousseau, if they are already acquainted with the educational theories of his predecessors like John Amos Comenius and John Locke. Similarly, Pestalozzi, Herbart, Froebel, Spencer, Dewey and Montessori can be better understood, if the readers are previously familiar with the educational contribution of Rousseau.

I have chosen to begin the book with a chapter on Comenius, because in him practically are found the germs of most of the educational ideas that influenced the later thinkers on education. Hence Comenius has aptly been designated as *'the Herald of New Education'* and *'the Teacher of All Times'*.

The book has been divided into two parts—Western and Indian. In the First Part, I have dealt with nine great western educators from Comenius to Montessori, and in the Second Part are depicted in detail the educational theories of three great Indian educators—Tagore, Vivekananda and Gandhi. In the last two chapters of Part Two, I have inserted some Gleanings on Education from the speeches and writings of two great philosopher-educators of India—Sri Aurobindo and Radhakrishnan. Professor Sarvapalli Radhakrishnan, lately President of the Indian Union, may rightly be called an *educator* in view of his eminent contribution to modern educational philosophy. Our ex-President, my revered teacher, at whose feet I had the fortune to sit, may undoubtedly be considered one of the greatest educational philosophers of the world. These Gleanings from Sri Aurobindo and Radhakrishnan will be an interesting study. Efforts have been made throughout to make a critical and comparative study of the doctrines of these reformers of education of the East and the West. I am confident, the pedagogical theories of these great educators will have an abiding appeal to those that are actively engaged in education, and will profoundly influence their lives, thoughts and actions.

In the preparation of this book I have consulted all the available literature on the subject, and the names of the authors of these works appear in the *Bibliography* appended to the book. I have taken the liberty of freely quoting their ideas and views and sometimes their very words wherever deemed essential. I owe a deep debt of gratitude to all these authors. I am especially grateful to the Visva-Bharati, the Advaita Asrama, Sri Aurobindo Asrama, the Arya Publishing House, etc., for the valuable material I have received for writing the different chapters of Part Two of this book.

The book seeks to discuss and present the theories and doctrines of the Great Educators in a purely non-technical and simple style. It is believed that not only the students of education but also the general readers as well as lay men will find the book easy, interesting, useful and instructive. I have tried to make the *Bibliography* as exhaustive as possible so that the scholars intending to carry on researches on this particular aspect of education may derive ample benefit out of it.

I am highly grateful to Dr. Roma Chaudhuri, *Vice-Chancellor,* Rabindra Bharati and to Father J. A. D'Souza, *Rector,* St. Xavier's College, Calcutta, who have very kindly blessed this book with Foreword and Introduction respectively.

I am sure, the book will prove useful to the students of Teachers Colleges as well as of Post-Graduate Departments of Education in the Universities. I believe that it will also be liked by teachers, educational administrators, parents, guardians and the like, who take an active and intelligent interest in the educational development of the country.

University of Calcutta
Department of Education
161, Syamaprasad Mookerjee Road
Calcutta 26
The 12th August, 1972

K. K. Mookerjee

Dedicated

to

the hallowed memory of

the Late Dr. Syamaprasad Mookerjee

whose inspiration, initiative, effort and enthusiasm

led to the creation of

the Teachers' Training Department

and

the Department of Education

University of Calcutta

Contents

PART ONE : Western

CHAPTER I. Comenius, the Representative of the Realistic Movement in Education (1592-1670) 1

CHAPTER II. Locke, the Advocate of the Disciplinary Conception of Education (1632-1704) 19

CHAPTER III. Rousseau, the Father of the Child-centric Tendency in Education (1712-1778) 36

CHAPTER IV. Pestalozzi, the Pioneer of the Psychological Trend in Education (1746-1827) 61

CHAPTER V. Herbart, the Originator of the Formal Steps in Education (1776-1841) ... 77

CHAPTER VI. Froebel, the Creator of the Kindergarten (1782-1852) 94

CHAPTER VII. Spencer, the Precursor of the Scientific Movement in Education (1820-1903) 111

CHAPTER VIII. Dewey, the Exponent of the Social Ideal in Education (1859-1952) ... 127

CHAPTER IX. Montessori, the Mother of the Children's House (1870-1952) ... 155

PART TWO : Indian

CHAPTER X. Tagore, the Herald of the National Ideal in Education (1861-1941) ... 183

CHAPTER XI. Swami Vivekananda, the Prophet of the Humanitarian Ideal in Education (1863-1902) 211

CHAPTER XII. Gandhi, the Progenitor of the Wardha Scheme of Basic Education (1869-1948) 235

CHAPTER XIII. Gleanings from Sri Aurobindo, the Apostle of Integral Education (1872-1950) 261

CHAPTER XIV. Gleanings from Radhakrishnan, the Protagonist of the Religious Ideal in Education (Born in 1888) 267

INDEX 273

BIBLIOGRAPHY 284

A good education is that which gives to the body and to the soul all the beauty and all the perfection of which they are capable'.

—*Plato*

*

'Education covers the entire field of life, * * * there is nothing in life, however small, which is not the concern of education'.

—*Gandhi*

SOME

GREAT EDUCATORS

OF THE WORLD

PART ONE

Western

CHAPTER 1

Comenius, the Representative of the Realistic Movement in Education (1592-1670)

"TEMPUS erit, quo te, Comeni, turba bouarum
Factaque spesque tuas, vota quoque ipsa colet."

["The time will come when the tumult of good people will pay respect to you, Comenius, your deeds, your hopes, and your prayers".]

The above words of philosopher Leibnitz were prophetic to foresee the love and respect with which the name of Comenius is mentioned in the world of letters, although more than three hundred years have elapsed since his death.

Johann Amos Comenius or Komensky was born at Nivnitz in Moravia, in 1592. His father was a miller who belonged to the Moravian Brethren, a religious community that believed in a simple, pious life based on the original gospel of Christ. Komensky attended a small village school where he learnt to read and write and contracted a deep love for his native language. In his boyhood, he grew in himself a lasting love for his land and religion. At twelve, when he lost his parents, misfortune befell him and his study was neglected. He entered the Latin school at the late age of sixteen and found study much to his taste. He felt the methods of teaching in Latin schools unsatisfactory and developed a desire to reform them in his later life. From Latin school, with a bursery from his Community Church he went to Herborn University where Professor Alsted had then created a new department of Teacher Training. Next he went to the famous Heidelberg University to complete his study of Latin, Greek, Philosophy and Theology. After the completion of his study there, he went on travelling to make his knowledge perfect and finally returned to Moravia in 1614. He was soon appointed to the Brethren's School at Prerov where he taught for the next two years. Here he made his first effort of educational innovation by writing a small text-book on Grammar following the method of the famous educator Wolfgang Ratke.

At the age of twentyfour he was ordained a priest of his community church and assumed the charge of a pastor at the headquarters of the Brethren at Fulnek. He was also the Director of the children's school attached to the church. At that time, the dreary Thirty Years' War broke out in Europe and in 1621, Moravia was plundered by the Spaniards who were especially merciless to protestant priests. The orgy of religious persecution dispossessed him of everything dear to his life—his wife, his child, his home and his manuscripts. But he, like a true Christian, retained his faith in the will of the Lord. He now found employment in a school of his community at the Town of Leszno in Poland. He at once realized that, though he was deprived of his family and country, a noble task awaited his service. It was the improvement of the traditional system of education and ultimately through the enlightened, universal education to find a path for mankind to the Kingdom of God. With this noble aim Comenius published in 1631 *Janua Linguarum Reserata* or Gate of Tongues Unlocked. This little Primer of learning Latin made him famous overnight in Europe and the book was translated in twelve European and four Asiatic Languages. Inspired by the sensation that the *Janua* had caused in the world of learning, Comenius now boldly planned a comprehensive scheme of universal knowledge and sent a draft of it to his friend and admirer Samuel Hartlib in England for patronage. Hartlib published his thesis under the title *Pansophis Prodromus* in 1638 and invited the author to England in the name of English Parliament. Comenius sailed to England in 1642 and published *A Reformation of Schools*. But a conflict grew between the Crown and the Parliament in England and Comenius's venture to establish the pansophic school there fell through. Fortunately, at this hour he found a patron in Lewis de Geer in Sweden. Accordingly, Comenius came to Sweden, settled at Elbing, married again and wrote a series of works on teaching Swedish Language in which the principles of *Didactica Magna* were worked out. For eight years he stayed at Sweden but found the Swedish sympathetic neither to his scheme of universal knowledge nor to the cause of his mother-land. Ultimately in 1650, after the Treaty of Westphalia was concluded much to the dismay of the Moravian emigré, he came to Transylvania, accepting an invitation from Sigimund Rakoczi, the ruler of the land, to establish a *pansophic* school there. It was the dream of his life. The school was started at Sovas-Patak where he laboured from 1650 till 1654. At this time he published the famous *Orbis Sensualium Pictus* or The World in Pictures which was the *first* illustrated school text-book.

Comenius, now the head of the church of the Brethren, moved to Leszno and stayed there upto 1657. But unfortunately he sided with the King of Sweden, Korl Gustov who invaded Poland. The Poles at their first opportunity fell on Leszno and destroyed the Moravian Community. Comenius escaped the slaughter but lost his priceless manuscripts on *Pansophia* and Latin-Bohemian Dictionary. "This loss", he wrote, "I shall cease to lament only when I cease to breathe". Finally he found asylum in Amsterdam and devoted himself to the writing of his ambitious *Didactica Magna* in Latin. Here in 1657 he gave to the world the educational classic *Didactica Magna* or The Great Didactic. The book brought the old master universal esteem as the discoverer of all the secrets of teaching. There grew a new appreciation of the way in which Comenius single-handedly transformed the dreadful school-rooms of Europe into joyful workshops of humanity.

At last in the year 1670, John Amos Comenius or Komensky died at Amsterdam at the age of seventyeight.

The educational writings of Comenius clearly show that he was a reformer in education with a positive purpose.

The purpose was the noblest of all that a human soul may conceive of. "First we must all have one and the same goal, the salvation of the human race," declared Comenius. For this, he engaged his body, mind and soul to the organization of a better society of man through a reformed system of education. His learning, humility and sympathy qualified him eminently to collate all the educational ideas of his great predecessors like Aristotle, Ritche, Campanella and Bacon, and by reducing everything to the immovable laws of Nature he developed his masterpiece, 'the Great Didactic', which showed naturally the art of teaching *all* things to *all* men. The significance of his educational thoughts lies in his originality and intuition with which he extracted out the essence of educational principles, embedded in the vast store of literature on Education, both ancient and modern, and incorporated and illustrated them in his works. This rarest power of mind, even of the Genius, enabled him to win the epithet: "Prince and Creator of Education and Teacher of Teachers".

Comenius was a deeply pious and religious-minded monk who never wavered in his pietist faith. He incorporated the tenets of Christianity into his philosophy of education. Comenius had stated this as the primary aim of his Great Didactic: "The ultimate end of man is eternal happiness with God. Education assists us in attaining this great end". He also said, "Education is the development of the whole man". Comenius stated *three* successive stages of preparation to reach this ultimate goal. In the Great Didactic he said:

"Man is situated among visible creatures so as to be—

(*i*) A rational creature,
(*ii*) The lord of all creatures,
(*iii*) A creature which is the image and the joy of its Creator."

These three aspects are so combined together that they form the basis of the present and the future life. His objectives of education were necessarily derived from these premises. In order to assume his rational function in the world, man must be acquainted with *all* things. In order to dominate over all creatures, man must become endowed with power over all things and over himself, and to prepare him for his religious mission, education must teach man to refer himself and all things to God, the source of all. So education has *three* main objectives: (*a*) *Knowledge* which aims at man's reason, (*b*) *morality* which aims at man's character, and (*c*) *piety* which aims at his understanding of God. The aim of education, as stated by Comenius, is *knowledge, virtue* and *piety* in this order of their acquisition. He observes as follows:

"Nature has implanted within us the seeds of learning, virtue and piety. To bring these seeds to perfection is the object of Education."

Comenius took it as the heavenly idea that man should know *all* things. Comenius's adherence to the concept of universality in learning found expression in his organization of the subjects of study. The pansophic movement of the seventeenth century produced many notable attempts at reorganization of curriculum. Of these, the Advancement of Learning of Bacon and the Encyclopædias of Henry Alsted and Campanella were notable examples.

Whereas the encyclopædias of the Middle Ages had been mere compilation of facts, Comenius's universal organization of knowledge had a deep meaning in itself. He visualized the foundation of a league of nations, based on universal language, universal book and universal school. He, therefore, demanded that education should be universal. Comenius remarked,—"The rich and the poor alike must be taught to use their hands and eyes". With this end in view, Comenius's aim was to give to each pupil "an accurate anatomy of the universe, dissecting the veins and limbs of all things in such a way that there shall be nothing that is not seen, and that each part shall appear in its proper place and without confusion". So his pansophic content was a systematic arrangement of prodigious store of knowledge of nature, man and religion with a universal rationale.

In the domain of education he published school textbooks as well as books on the theory and practice of education. Rusk puts it, "Comenius not only proposed to teach '*all* things to *all* men', but set about in a practical fashion organizing a universal system of education, devising a method of teaching which would hasten the realization of his ideal, and even preparing school books to illustrate how his method should be applied."

According to Comenius, study in all arts and sciences should proceed from what is known to what is knowable until all knowledge is encompassed. Comenius, like Bacon, believed that Nature was a great Laboratory where truth should be discovered and tested. Nature, therefore, occupied a large part of the content of study which he advocated.

Comenius was myriad-minded in innovation in his efforts to reform schools. He initiated the modern system of gradation of instruction at different stages of the pupil's life. In his Great Didactic, he wrote: "The whole period of growth, therefore, must be divided into *four* distinct grades, *viz.*, infancy, childhood, boyhood and youth; and to each grade *six* years should be devoted and special schools should be assigned:

(i) For *infancy,* the school should be the Mother's Knee or the Mother's Lap.

(ii) For *childhood,* the school should be the Vernacular School.

(iii) For *boyhood,* the school should be the Latin School, or the Secondary School, or the Gymnasium.

(iv) For *youth,* the school should be the University and Travel.

A Mother School should exist in every home, a Vernacular School in every hamlet or village, a Gymnasium or Latin School in every city, and a University in every kingdom or in every province."

(*i*) In the *Mother School* must be laid the foundation of 'the rudiments of all the knowledge that we wish to give a human being for the needs life.' Here a beginning must be made with all the sciences and arts. The growing acquaintance of the child with the things of Nature, such as, earth, air, water, fire, iron, stone, etc., should form the groundwork for the later study of Physics and Chemistry. The mother will point the child to the sun, the moon, the stars, the planets, etc., and this will prepare the way for the study of Astronomy and Astrology. The child will observe the plants, trees, leaves, flowers, etc., and this will serve as the groundwork for the after study of Botany. The observation and study of the insects and domestic animals will be the foundation for the study of Zoology. The child's acquaintance with the actions and relations of persons should be made the beginning for the future study of Civics, Economics, History and Sociology. William Boyd has observed, "*Seeing, hearing, tasting,* and *touching* involve the use of general terms, such as, *something, nothing, is, is not, thus, otherwise, where, when, like, unlike,* etc., and thus lay the foundation of metaphysics. ****** In like fashion, the intelligent use of words at this stage is the key to all the different branches of knowledge." Not only this. At this stage we can also lay the basis of all moral and religious training by the examples and precepts of the parents and the elders. 'Religious instructions may be imparted by teaching the child to pray and to commit to memory the Lord's prayer.'

This stage, according to Comenius, is the most important of all stages of education, and the child should be well looked after and properly guided and trained during this period of infancy. Learning at this stage should not be coercive but automatic. "Education", he said, "must be a perfectly smooth and natural process and there should be no tinge of artificiality or coercion. Education should come to children as flying to birds, swimming to fish and running to animals." As 'aids to this comprehensive beginning', Comenius suggested *two* books,—one for the mothers to show them what to teach, and the other for the children themselves. The first was the *School of Infancy,* and the second was *Orbis Pictus* or the *World in Pictures* or the *Visible World,* which is the first illustrated reading book ever written for children. This book was a popular text for about two centuries. It made 'the senses the earliest medium of instruction'.

Thus we have every reason to believe that the Mother School of Comenius had a great influence upon the educational thought of Friedrich Froebel, the father of the Kindergarten.

(*ii*) In the *Vernacular School* children should be instructed in the elements of knowledge of those things which may be useful to them throughout their whole lives. The mother tongue should be made the basis of all instruction, and the curriculum should consist of the 3R's, measuring, singing, history, geography, the elements of mechanical arts, as well as morality and religion. Here the children should be given opportunities to find out their special aptitudes and tastes.

(*iii*) In the *Gymnasium* or Latin School also, the course is encyclopædic—'nothing less indeed than *pansophia*, universal wisdom.' The curriculum includes the mother tongue, Latin, Greek and Hebrew, and also the seven liberal arts of mediæval education (*trivium* consisting of Grammar, Rhetoric and Dialectic, and *quadrivium* consisting of Arithmetic, Geometry, Music and Astronomy), and also Physics, History, Geography, Ethics and Theology.

(*iv*) In the *University* all branches of knowledge should be taught but only the 'select intellects' are to be admitted here. In this respect, too, Comenius is a modern educationist. Each student at this stage should be encouraged to confine himself to that particular branch of advanced study for which he is best fitted. "Only the students of exceptional ability should be allowed to pursue *all* branches of learning."

"Above the University was the College of Light, an institution for scientific investigation of every subject." (*Monroe*)

Comenius thus determined about three hundred and fifty years ago, with an exactness that leaves nothing to be desired, the division of the different grades of instruction, which were practically accepted in later years by Rousseau.

The Science of Teaching or Pedagogy of Comenius grew out of his philosophy of *sense-realism.* The sense-realists in education demanded a 'new content' and a 'new method' in education, namely the firsthand study of things, especially *Nature,* and the Inductive Method. Comenius said, "Learn as much as possible from the great book of Nature." The only realities, according to the *sense-realists,* are the *things* and objects one comes in contact with, through one's senses. With them, therefore, we find the beginning of modern science. Comenius successfully transferred the inductive method so ardently espoused by Bacon to the theory and practice of education.

One of Comenius's most distinctive principles was that there should no longer be the divorce of words from things and that the knowledge of things and words should go hand in hand. This principle of simultaneity of idea and thing he added to the realistic principle of submitting every item of knowledge to the pupils' senses and thereby caused a revolutionary change in the method of teaching. According to Comenius, "Everything in the intellect must have come through the senses". He said that the organs of senses have been given to the rational soul within us and there is nothing in the universe which cannot be encompassed by a man endowed with sense and reason. From this fact a golden rule for teachers might be derived that 'everything should, as far as possible, be placed before the elementary senses'. The senses are the trusty servants of memory. The method of sensuous perception, if universally applied, will lead to the permanent retention of knowledge. Comenius, therefore, rightly said, "If the superstructure is not to totter, the foundation must be laid well." He further said, "The concrete should precede the abstract; the simple the complex; the nearer the remote."

Comenius is practically the earliest of modern educational thinkers to attempt to formulate general principles upon which sound educational practice should be based. In his attempt to lay down the principles and theories of education we come across *three* influences at work to determine his conception of the method of education. They are as follows: (*i*) Sometimes Comenius conceives of the mind after the manner of Locke as a *'tabula rasa'* or a wax tablet upon which the manifold impressions received through the senses make their mark. (*ii*) At times, again, he thinks of the mind as made up of a number of separate powers or faculties, each capable of 'separate and independent development.' Hence, according to Comenius, the principal object of the Infant School or Mother School, or the '*School of the Mother's Knee*' should consist in developing the external senses or the *perceptual faculty* of the child; the Vernacular School should aim at developing the *faculty of memory and imagination* of the child; the Latin or Secondary School should concern itself with the training of the *reasoning faculty* or the power of judgement of the youth; and the chief object of the University should be to develop the *moral will* of the individual. (*iii*) The third and most important characteristic of Comenius's educational principles is that he believed that all methods and modes of instruction should be based upon the analogy of the operations of Nature.

Comenius flourished about two hundred years before Psychology developed as a science; it is surprising that he understood even at that time the rudiments of *individual differences* among children and their significance. In this connection, his observations are pertinent: "This is a suitable place in which to make a few remarks about differences of character. Some men are sharp, others dull; some soft and yielding, others hard and unbending; some eager after knowledge, others more anxious to acquire mechanical skill. From these three pairs of contradictory characters we get, in all, *six* distinct divisions." The effort to classify pupils and to take the differences of character among them into account in planning their education is a direct evidence of his attempts to lay an edifice of the Science of Teaching.

Again, Comenius was one of the first teachers to emphasize that the aids and appliances of instruction used in school should be specifically adapted to the abilities and interests of children. On the use of properly adapted materials, Comenius had the following comments to make: "Beginners should at first practise on material that is familiar to them; students should not be over-burdened with matters that are unsuitable to their age, comprehension and present condition, since otherwise they will spend their time in wrestling with shadows." In the seventeenth century, when the usual practice was to start children with the writings of Cicero, these suggestions of Comenius were simply modern.

Comenius saw in the science of teaching the means of training every human creature to become a reasonable being. And this training, according to him, should be such as to draw out God-given faculties. "Thus he struck", says Quick in his Essays on Educational Reformers, "the key-note of the Science of Education".

The educational achievement of Comenius appears in *four* directions:

(*i*) his Great Didactic, an educational classic like Plato's Republic and Rousseau's Emile;

(*ii*) his attempts to create an encyclopædic organization of scientific knowledge (*pansophia*);

(*iii*) his series of texts for learning Czech and Latin (mostly illustrated and written in inductive method);

(*iv*) his foundation of a Science of Teaching based on sense-realism.

By way of criticism, we might point out, by quoting the following words of R. H. Quick,—"Comenius immensely over-estimated the importance of knowledge and the power of the human mind to acquire knowledge. He took it for the heavenly idea that *man should know all things*." In these days when the horizon of each department of arts and sciences and technology has wonderfully widened, and the different branches of knowledge are vast and varied, it is impossible for any one to pick up even the smallest fragment of a particular branch of learning. In his old age Comenius himself realized his own error that he attempted *too much* and that his scheme was a bit too ambitious. He said, "It is better to know a few things and have the right use of them than to know many things which you cannot use at all."

Another mistake did Comenius commit in maintaining that in the mere accumulation of knowledge lies the achievement of the moral end in education. But we know that 'it is only the knowledge that is assimilated and that can be used in the furtherance of a social end is of value either in the intellectual or in the moral training of the young.'

Then, again, Comenius over-stressed importance of sense-training. He was also mistaken in his application of the 'method of nature' which seldom implied for him the method of *experiment* but the method of *analogy*. 'Analogies, as we know, are good for illustration and not for proof.' Comenius was undoubtedly right in drawing his principles of education from Nature by watching the life of birds, the growth of trees and plants, and by observing the 'quiet influence' of the sun and the moon. But he refrained from examining the proper constitution and nature of man. He substituted for the nature of man '*nature without man.*' And yet, according to Comenius himself, 'the vegetative and animal life in nature is no life at all in its highest sense but the only true life is the intellectual and spiritual life of man'.

The educational doctrines of Comenius wielded a profound influence upon the later educators. Comenius is one of the early exponents of the doctrine of 'education according to nature' which Rousseau ardently advocated and rigidly followed in the education of his dream-child *Emile*. Again, the idea of the different grades of instruction, such as, the School of the Mother's Knee, the Vernacular School, the Latin School or the Gymnasium, *etc.* each extending for a period of six years, influenced Rousseau in devising his scheme for Emile's education in *four* well-defined stages. It may also be noted here that in his insistence upon the need of basing all knowledge upon the sense experience of the child, Comenius anticipated by nearly two hundred years the fundamental principles of the educational method expounded by Pestalozzi.

Comenius, like Froebel long after him, sought to strive after a higher unity embracing knowledge of every kind. The establishment of the unity and connection of knowledges so consistently overlooked in the school-room was the ruling passion of his life. "How can we hope that the branches of wisdom can be torn asunder with safety to their life, that is, to truth ? Can one be a natural philosopher who is not also a metaphysician or an ethical thinker, who does not know something of the physical sciences, or a physician who is not first a philosopher, or an orator or poet, who is not all this at once?"

Again, his advocacy of 'education for all' anticipated by nearly three hundred years the *democratic* principle of education preached by John Dewey in America. Comenius demanded that education should be universal and that instruction was necessary for all, high or low, rich or poor, boys or girls.

Religion and Science are both universal, but historically there exists an antithesis between the two, because they have two separate mental correlates—'intuition' and 'reason'. Reason, when united with intuition, leads to piety, and Science, sanctioned by Religion, leads to union with the ultimate soul. The fundamental contribution of Comenius to education is his synthesis of Science and Religion in his scheme of *universal* education. This singular achievement distinguished his life so much that, in the course of three hundred revolutions of the earth round the sun since his death, the name of Comenius has become a universal legacy of mankind.

In conclusion, we must assert that in spite of the defects and weak points in his educational theories Comenius will rightly be considered a great educational reformer and the progenitor of modern education to whom education meant a system for controlling the lower nature of man by the higher, through mental, moral and religious training. Some two hundred years later, Herbart, the great German philosopher-educator, almost exactly echoed these very words of Comenius when he said that "education consists in the conquest of the lower impulses by the higher altogether. It may be summed up in one concept or *morality*". From all these considerations, Comenius may aptly be designated as '*the Teacher of All Times*' and '*the Herald of New Education*'.

It is in the fitness of things that towards the end of 1970 the world celebrated the *three hundredth* death anniversary of this great educator. We witnessed the celebrations in India, too. The National Institute of Education, under the National Council of Educational Research and Training, India, brought out a *Souvenir* on this occasion, in which the writer of the Foreword has penned these beautiful lines: "Comenius was truly one of the pillars of educational thought. He has lived in our memories for these 300 years and I have no doubt he will continue to live in the memories of many generations yet to be born into this world."

CHAPTER 2

Locke, the Advocate of the Disciplinary Conception of Education (1632-1704)

JOHN Locke's life has been described by his biographer Richard Aaron as 'a passage from an age of enthusiasm to an age of reason'. Locke was born of a middle class puritan family of England in August, 1632 and was brought up in an atmosphere so as to love virtue, truth, purity, reason, simplicity, sobriety and political liberty. He was educated at Christ Church College, Oxford and served here for some years as a Lecturer in Classics and Rhetoric. He also worked for sometime as a Lecturer in Moral Philosophy. But somehow he acquired an interest in Medicine and studied this subject assiduously. He qualified himself as a physician, though he never became a doctor by profession. Ultimately Locke discovered that the real vocation of his life was philosophy.

Subsequently he distinguished himself as a great educator. His interest in education was no less ardent than in philosophy. He has been considered to be the most influential of all English writers on education. Robert Herbert Quick observes, "When an English University established an examination for *future teachers,* the 'special subjects' first set were 'Locke and Dr. Arnold'. Arnold greatly affected the spirit and even the organization of our public schools **** We English revere Arnold, but so long as the history of education continues to be written, the only Englishman celebrated in it will be as now not the great school-master (*referring to Dr. Arnold*) but the great philosopher (*referring to John Locke*)." Sir John Adams also corroborates this statement in his remark that 'Locke's influence far exceeds his fame. His point of view coincides so completely with that of the ordinary intelligent man in the street, that his following in all English-speaking countries is infinitely greater than any other philosophical writer can command'.

Locke was well qualified to write on education. On the continent he has been regarded as one of the first advocates of physical education and physical well-being of the child. His medical studies combined with the fact that he frequently suffered from ill health impressed upon him the importance of sound physical health. Hence Locke gave physical education the first place in his theory of education. This is evident in the very opening lines of his monumental work '*Some Thoughts Concerning Education*': "A sound mind in a sound body, is a short but full description of a happy state in this world: he that has these two, has little more to wish for; and he that wants either of them, will be but little the better for any thing else". These are oft-quoted lines.

In this respect Locke greatly influenced his disciple Rousseau who also laid extreme importance on physical education. Rousseau did not want Emile to receive any intellectual education until he was twelve years old. All these years Emile was to pay attention to his health because a good physique, according to Rousseau, is essential for obtaining moral and intellectual development. Rousseau says, "All wickedness comes from weakness. A child is bad only because he is weak. Make him strong and he will be good. A feeble body makes a feeble mind."

Locke was not a 'man of the study'. He held many important political positions. Yet he wrote many books on Politics, Economics, Psychology, Philosophy and Education. Working for long twenty years he published his famous work *'Essay Concerning Human Understanding'*. Locke devoted only his spare time and leisure hours to writing. Some of his other famous works are: *Some Thoughts Concerning Education, Of the Conduct of the Understanding, Letters on Toleration, Some Observations on Printed Money,* etc. The latter titles indicate that many of Locke's works were occasional writings—'tracts for the times.'

Of these writings, *Thoughts Concerning Education* deals expressly with educational principles and problems. In fact, Locke tutored several children with marked success and wrote a series of letters to one of his friends, who had asked his advice as to the best way of bringing up and educating his young son. These letters appeared later on in the form of *this* treatise, and the theme of the book pertains to the 'upbringing of a gentleman's son under a tutor'. This famous educational treatise greatly influenced the thoughts and ideas of the later educators like Rousseau, Pestalozzi, Herbart and others. Robert Ulich puts it, "The great influence of Locke's *Thoughts* springs from the fact that they expressed exactly that which the best members of the English ruling class wished their children to become: gentlemen with respect for moral standards, religion, and convention, with balanced judgment and good common sense, with knowledge helpful for a practical life and decent forms of leisure, and a strong sense of independence as far as their own class was concerned."

John Locke was a man of versatile genius, a distinguished psychologist and a physician. Finally he served as a private tutor for a considerable number of years, and as such he had ample opportunities to study the reactions of the child to educative process. The rich and varied experience that he gathered while tutoring a 'gentleman's son' took shape in the form of his famous treatise *Some Thoughts Concerning Education.* 'The versatility of Locke's genius combined with the fact that his writings are full of many inconsistencies, contradictions and compromises, leads the writers on education to draw very different conclusions about his exact views'.

By some writers Locke has been called a *Social Realist.* This view is warranted by the fact that Locke wanted for the child a type of practical education and that he laid emphasis on 'travel' and the study of history, geography, modern languages, etc.

Others again have classified him as a *Sense Realist* because, according to Locke, the materials of knowledge come to us through the *senses* and by contact with the actual things or objects.

Some other writers have put Locke in the category of *Naturalists* along with Rousseau, the reason for such classification being that both Locke and Rousseau had certain elements in common: both of them laid stress upon the 'natural curiosity' of children in the matter of their intellectual development; to both, physical education was of primary importance; and both preached the doctrine of *discipline by natural consequences.*

But from a perusal of the *Conduct of the Understanding* we come to the conclusion that Locke was an advocate of the *Disciplinary Conception* of education. Education, to Locke, was rigid *discipline.*

In the domain of philosophy Locke may be regarded as an exponent of the school of *rationalism.* "Reason," he said, "is the sole guide to philosophy. Reasoning never deceives any one who trusts to it." Hence the thought underlying his philosophy of education is this: real knowledge can be gained only by the exercise of the reason: but in childhood the reasoning faculty is not fully developed and hence the acquisition of knowledge is out of the question at this stage: the only concern of the child, therefore, at this age is the formation of habits.

It may be noted in this connection that Rousseau was in perfect agreement with Locke in holding the view that 'childhood is the sleep of reason'. But Rousseau differed from his predecessor in respect of the question of the formation of habits. He said, "The only habit that Emile should form is to form no habit whatsoever".

Discipline, in Locke's conception, consists in the formation of habits which include the building up of *physical habits, moral habits* and *intellectual habits,* corresponding to his theories of *three* kinds of education, namely, *physical education, moral education* and *intellectual education.* Locke remarks, "The great mistake I have observed in people's breeding their children has been, that this has not been taken care enough of in its due season ; that the mind has not been made obedient to *discipline* when at first it was most tender, most easy to be bowed."

Locke believed that corporal punishment was a 'sign of failure' on the part of the teacher. Discipline, according to him, must not be based on force or threat of punishment. The teacher should teach through his own example and by way of suggestion. Locke observed, "Beating is the worst and therefore the last means to be used in the correction of children and that only in cases of extremity, after all gentle ways have been tried and proved unsuccessful."

Education, for John Locke, is not regarded as a State concern but a 'parental duty'. The child, according to him, should be stimulated by example and ruled by *habit.* He holds that a man's proper business is to seek happiness and avoid misery. By 'happiness' Locke meant health, reputation, knowledge and wisdom, doing good to others, and so on. He puts it, "As the strength of the body lies chiefly in being able to endure hardship, so also does that of the mind. And the great principle and foundation of all virtue is placed in this, that a man is able to deny himself his own desires, cross his inclinations, and purely follow what reason directs as best, though appetite leans the other way." This is the cornerstone of Locke's theory, as observed by H. G. Good. Locke continues, "The ability to reason originates early in life and should be cultivated from the very first. But although it begins early, it develops slowly and therefore children must for a considerable time be directed by *adults.* Before the child can be permitted to make his own choices, at least in difficult cases and on weighty occasions, he must be conditioned to make the right choices".

Previously we spoke of some inconsistencies and self-contradictions in Locke. And here is one such example when he says that 'the ability to reason originates early in life' (5th Line above), elsewhere maintaining that 'in childhood the reasoning faculty is *not* fully developed' (*vide*—Page 23).

That Locke was an advocate of the *disciplinary conception* of education is evident from the fact that while speaking of 'moral education' he made character the end of education. And that end, according to him, could be obtained by the formation of good habits through a long 'discipline of the desires'.

Let us now glance over Locke's *psychology* in brief. Although Rousseau or Pestalozzi is generally given the credit of psychologizing education, Locke may be regarded as the fore-runner of the *child-study* movement in education. The following lines bear testimony to this fact: "He that is about children should well study their natures and aptitudes, ... observe what their *native stock* is, how it may be improved, and what it is for ; he should consider what they want. * * * * For, in many cases all that we can do is to make the best of what nature has given, to prevent the vices and faults to which such a constitution is inclined, and give it all the advantage it is capable of." The last part of this quotation reminds us of Rousseau's theory of *negative education.*

Elsewhere Locke has stressed the fact of *individual differences* among children which should be taken notice of in the matter of bringing them up or educating them. So says Locke, "Each man's mind has some peculiarity as well as his face, that distinguishes him from all others : and there are possibly scarce two children who can be conducted by exactly the same method: besides that I think that a prince, a nobleman or an ordinary gentleman's son should have different ways of breeding."

Locke denied the existence of *innate* ideas in the mind and held that the mind is a *tabula rasa*—a 'blank tablet' like 'white sheet of paper' or 'wax' to be moulded and fashioned as one pleases. Various metaphors may be suggested here. The mind may be compared, according to Locke, to a 'dark chamber' where there is no light, or to a 'clean slate' where there is no inscription at first. Just as no marks can appear on the paper unless they are put there from outside, so the materials for all ideas can come to the mind through the *senses* as a result of experience with the external world. There can be nothing in the intellect which was not previously in the senses. 'Locke allowed nothing to be knowledge that was not acquired by the perception of the intellect'. The simple ideas, says Locke, obtained from perception are developed into higher forms of mental life by means of *reflection,* that is, by 'reasoning'. Locke asserted that there are *two* windows to the mind through which the light of the external world penetrates into its dark chamber. They are external perception and internal perception or *reflection.* According to Locke, knowledge is the internal perception of the mind. Thus Locke contradicted himself and rightly so, in asserting that the power of internal perception or reasoning is intrinsically or innately possessed by the mind, although he began with the presupposition that there are no innate ideas in it. 'Locke's imagery of the *tabula rasa* has had an influence far beyond his times. . . . He was in this, as in all his positions, a radical and a rationalist'. His radicalism and rationalism were also revealed in his theory of *'formal discipline'* or, *'mental discipline'* in education.

Let us briefly explain what is meant by *formal discipline* or formal training. The theory of formal discipline in education is based upon Aristotle's *Faculty Psychology* which considers the mind to be made up of certain distinct faculties, such as memory, imagination, reason, will, etc., each of which requires special training and development. This doctrine included various subjects in the curriculum not so much for their content value but for the mental training resulted and also for exercising the different faculties of the mind. The theory maintained that the power developed in any faculty by the study of a particular school subject can be used equally well in any other subject to meet any other experience of life, however remote in time from the original disciplinary experience; 'that just as the muscular strength developed by any physical exercise can be used for any purpose, so the power of memory or reason developed by exercise in any subject of study can render equal service in any other study or situation'. This view leads to the psychological doctrine of *'transfer of training'* as a corollary, which implies the improvement in mental or motor function without direct training, but through some other device, of course, having some close relation with it. As for instance, the reasoning power developed by the *study* of Geometry could generally be used in other spheres like law, engineering, teaching, and so on. The advocates of this theory hold that the classical studies because of the orderly arrangement of their parts, and Mathematics because of the universality of its principles are particularly well suited for training all the powers or faculties of the mind, especially, memory and reasoning faculty. Hence these two subjects or disciplines occupy the foremost position in the curriculum, and the study of no other subject is necessary in as much as the mental power developed by the study of Classics and Mathematics can help us to master other subjects with ease and facility. But this theory is now exploded because modern psychology does no longer hold the view that mind is made up of diverse faculties. We have now accepted the *unitary* conception of the mind. The idea of the mind has been radically changed in modern times.

Now we shall see what kind of education and instruction John Locke wanted 'every single boy' to receive. He held that the proper training and education can be secured by the young gentleman only through a private tutor who "should himself be well-bred, understanding the Ways of Carriage and Measures of Civility in all the Variety of Persons, Times, and Places, and keep his Pupil, as much as his Age requires, constantly to the Observation of them". While speaking of the aims of education Locke writes in his *Some Thoughts Concerning Education,* "That which every gentleman desires for his son, besides the estate he leaves him, is contained in these *four* things, *Virtue, Wisdom* (i.e., worldly wisdom), *Breeding* (i.e., good breeding), and *Learning.*"

Our discussion will remain incomplete unless we say a few words about Locke's theory of Physical Education, Moral Education, and Intellectual Education.

According to Locke, good health is an essential prerequisite to the attainment of the four different aims of education mentioned above. We have already quoted some of Locke's sayings and views on physical education. As regards *hardihood,* Locke puts it, "Plenty of open air, exercise and sleep: plain diet, no wine or strong drink, and very little or no physic: not too warm and strait clothing: especially the head and feet kept cold, and the feet often used to cold water and exposed to wet." This hardening process in Locke's disciplinary theory, while prescribing for the pupil rigid diet, scanty garment, hard bed, etc. reminds us of the austere life of the *Brahmachari* in the *Brahmanic* system of education in ancient India where *discipline* was the very basis of life. Such views of

Locke greatly influenced Rousseau's theory of Emile's physical education, as we shall see later on.

With John Locke, the all-absorbing aim of education is *virtue*. The child must cultivate good breeding and manners. Locke attached greater importance to moral training than to intellectual education imparted by parents at home or teachers in schools. According to him, moral influences can alone control the impulsive and wayward behaviour of the youth. He condemned traditional schooling in the following words: "We learn not to live but to dispute; and our education fits us rather for the university than for the world." Thus, the cultivation of virtue, in Locke's opinion, is much more important than knowledge. The first lesson that the pupils must learn is that they are not to have anything because it pleases them but because it is thought 'good' for them. The aim of moral eduation, according to Locke, is to form in the child certain moral habtis, such as, obedience to superiors, humility, submission to authority, and so on. In the words of William Boyd, "Moral education for Locke resolves itself into having a true notion of God, speaking the truth, and being good-natured".

Book-learning with both Locke and Rousseau does not begin early, and it occupies a place of subsidiary importance. Locke says, "Our business is not to know all things but those which concern our conduct." In his opinion, the function of the tutor is not so much to teach the pupil all that is knowable as to instil in him a love and esteem of knowledge. Hence the emphasis is actually on the building up of intellectual habits rather than on the accumulation of knowledge and information. Yet, with curious inconsistency Locke has suggested for his pupil quite a *comprehensive* programme of studies including some *six* groups of subjects, viz., (*i*) Reading, Writing and Drawing, (*ii*) French (to be learnt orally as soon he can speak English), Latin, and English (to be studied throughout), (*iii*) Geography, Chronology, and History, especially Roman History, (*iv*) Ethics, from a study of the Bible, (*v*) the Art of Speaking and Writing English, and (*vi*) Dancing, Music, Horseback Riding, Fencing and Wrestling.

In prescribing this encyclopaedic knowledge, although Locke was to some extent influenced by Comenius, yet there are striking differences in the standpoints of the two. Locke wanted to produce a refined gentleman's son with polished taste and behaviour and with a wide variety of knowledge,—to educate one particular pupil who would be 'a prospective member of the English gentry'. Secondly, as Locke himself says, "I do not propose the course as a variety or stock of knowledge but as a variety and freedom of thinking—as an increase in the powers and activities of the mind and not as an enlargement of its possessions."

The method of acquiring this knowledge was through *reasoning,* i.e., by observing the connection of ideas and by following them in train; and to Locke, nothing could do it better than *Mathematics* which must be taught to everybody not so much to make him a mathematician as to make him a reasonable creature.

To complete all education Locke finally recommended *travel.* He says, "The last part in education is *travel,* which is commonly thought to finish the work, and complete the gentleman." This, indeed, is very useful in life.

Let us now pass on to consider some of the permanent elements of Locke's educational theories that appeal to us, and also point out their weaknesses.

Locke was certainly right in maintaining that the physical education of the child is of primary importance in any scheme of education. He was also right in upholding a high standard of moral education and in insisting on the pupil's mastery of the rudiments of various branches of knowledge. He was not satisfied by enabling the pupils merely to *know* things but he wanted them to modify their entire social and moral outlook, behaviour and conduct in the best possible manner and act up to the ideals by following them in their own lives and examples. The strengthening of mental powers by exercise and by the formation of useful habits was emphasized by him as more important than the mere acquisition of knowledge. He says, "A man must be a philosopher indeed if he can spend his life in teaching boys, and yet always think more about what they will *be* and what they will *do* when their schooling is over than what they will *know*." In this respect Locke was ahead of Pestalozzi who also said in almost similar words, "It is all good and well for them (children) *to learn* something but the really important thing for them is *to be* something."

Locke made a distinction between education and instruction. Education, he held, is much wider than instruction. Instruction is merely intellectual education and aims at a partial development of the child, while education aims at an *all-round* or balanced development of the individual, physical, moral and intellectual.

Another redeeming feature of Locke's educational theory is that he advocated pleasant methods of education and condemned harsh measures. He held that learning must be made joyful and interesting to the child. The studies of the child should be combined with his games and plays. He should be given the opportunity to prepare dolls and toys for himself and should *'learn by doing'*. According to Locke, foreign languages are to be taught by the method of conversation rather than by memorizing the grammatical rules. He said, "If reading is made a delight, a boy will continue to study and become a cultivated man when he grows up; but if his reading appears to him as an unpleasant task, he will have no taste for it in after life." Thus we find that Locke seems to have anticipated the play method or *playway in education,* which Froebel long afterwards advocated in his Kindergarten as the only method of education.

Locke's educational philosophy had a great influence on the English national system of education. The English Public Schools owe their insistence on their programme of health education, social and moral education and practical training to Locke's educational theories. He was the forerunner in the Rationalistic Movement known as the *Enlightenment* which sprang up in France and was nourished under the leadership of Voltaire.

One of the principal drawbacks in Locke's educational scheme is that he advocated home education—a private tutorial system which is neither feasible nor desirable.

Rousseau, too, committed the same mistake in the education of Emile. *But* no State can afford the private education of individuals. 'Home keeping youths have homely wits'—goes the saying. We can never deny the value of education that we derive in contact with the social environment. Locke made provision not so much of the man as of the *gentleman* in his scheme of education. He had in view not so much the common laws of the mind as of the peculiarities of the individual mind. 'The special demands which the various callings and needs of life make upon the education of the middle class people received no consideration from him'. Further, Locke denied the utility of the training of the senses, which, however, is an important feature of the 'discipline of the body'.

Again, he regarded the human mind as a 'white sheet of paper' or 'wax', ignoring thereby 'the conception of education as gradual unfoldment or development of the organism'. Hence we have rejected his *tabula rasa* theory. His predecessor Comenius rightly said, "Nature has implanted within us the seeds of learning, of virtue, and of piety. The object of education is to bring these seeds to perfection." Similarly, Pestalozzi who came to the field about a hundred years later than Locke was also right in asserting that 'education instead of merely considering what is to be imparted to children ought to consider first what they already possess.'

H. G. Good makes an estimate of Locke's character and personality saying,—"John Locke was a man of the council table rather than the study, prudent and skilful rather than scintillating. Known for his genial friendliness, he was equally noted for self-restraint and ability to hold his tongue."

In conclusion, it may be observed that the bright aspects of Locke's educational philosophy far outweigh the weak points, and hence the name of John Locke will ever be written in letters of gold in the list of educational reformers or Great Educators of the world.

CHAPTER 3

Rousseau, the Father of the Child-centric Tendency in Education (1712-1778)

JEAN Jacques Rousseau was born in Geneva in 1712 of a French father and a Swiss mother. His father was a pleasure-loving, eccentric and sentimental watchmaker. Rousseau's mother died when he was only one week old. So he was not properly brought up and attended to in his early years and contracted bad habits like stealing, lying, pilfering, playing dirty tricks, etc. He became 'ill-bred', 'indolent' and 'unprincipled' in life. All his education was sporadic and desultory. But he acquired a deep interest in the study of biographies and the histories of the times. In course of his wanderings which he loved very much Rousseau acquired an ardent love of *nature*, and this is a unique feature which later characterized his philosophy of life and of education.

At the age of twentynine Rousseau settled in Paris and began to take interest in the social and political affairs of the day, always sympathizing with the poor, the oppressed and the degraded. He gradually became famous as a *'censor of civilization'*. Rousseau first came into public notice in 1750 through his prize-winning book *'A Discourse on the Moral Effects of the Arts and Sciences'*. "In this prize essay Rousseau maintained that civilization, the arts, the sciences and all human institutions were from first to last pernicious in their effects, and that no happiness was possible for the human race without giving them all up and returning to what he called—the *state of nature.*" Rousseau glorified the 'noble savage'. His thesis in the above-mentioned treatise was something like this: "Man was once happy: man is now miserable: undo everything that he has done, and man will be happy again."

In the year 1752, Rousseau published another book *'The Origin of Inequality among Men'* where he 'laid the axe to the root of the *social* system of Europe'. One of his famous publications, *'The Social Contract'* was brought out in 1762 'which completed his raid against the political basis of government'. Here the author propounded 'a revolutionary theory of State on the basis of the *natural* rights of man'. In this treatise occurs the famous line: "Man is born free but everywhere he is in chains." From these writings Rousseau is considered to be one of the originators of the French Revolution. In fact, Napoleon observed that but for Rousseau, French Revolution would not have been possible.

Rousseau is still fresh in the memory of the educationists all over the world on account of his greatest and most famous original work *'The Emile'*, an educational novel, the most representative of all his writings. It is the philosophical romance of Rousseau—one of the most seminal books in the whole literature of education and perhaps in *all* literature. *The Emile* is one of the finest treatises on education ever written and it has exercised an extraordinary influence upon subsequent educational thought. This book, also published in 1762, 'uproots whatever is traditional in education and religion'. In this treatise, too, Rousseau has strongly pleaded for 'going back to nature' and applied his favourite doctrine of *naturalism* in education. A revolutionary reaction against the dominance of arbitrary authority, religious orthodoxy, traditional classicism and the disciplinary conception of education prevailing in the earlier part of the eighteenth century Europe found expression in the writings of Voltaire and Rousseau. Voltaire's 'Illumination Movement' was aristocratic and indifferent to the rights and needs of the general mass of people. So it soon *degenerated into mere formalism and artificiality and* consequently became a tyranny for the mass. Rousseau, however, with his spirit of *'naturalism'* and *'emotionalism'* opposed the intellectual aristocracy of the century and preached the gospel of the *common man* and demanded for him an education based on 'nature' as a *right of birth*. "The fermenting ideas of the age which overflowed in his theories", as Morley says, "cleared away the accumulation of clogging prejudices and obscure and inveterate usage which made education one of the dark formalistic arts ; and it admitted floods of light and air into the tightly closed nurseries and school-rooms."

In politics Rousseau was a sincere and convinced republican. We have already pointed out how his thoughts and writings paved the path for the French Revolution. His political creed exerted a considerable influence upon educational reforms.

Rousseau found that artificiality had choked the good, beautiful and truthful nature of humanity, and customary and mechanical classification had forced the beauty of the human nature to fade away. He boldly declared: "Do precisely the opposite of what is usually done, and you will have hit on the right plan." His advice in this case does not seem to be reformatory but rather revolutionary.

In the field of education the influence of Rousseau has been powerful beyond measure. He may be called the progenitor of modern pedagogy. It has been rightly said that all modern pedagogic theory is inspired by *the Emile* and Rousseau's knowledge of the child. To quote a Rousseauistic critic, "Jean Jacques Rousseau, a vagabond without family ties or social status, with no literary training and with little knowledge, has influenced Education in its aims, content, method and organization more than Montaigne with all his wisdom, or Comenius with all his philanthropy, or Locke with all his reason and truth."

Rousseau may aptly be designated as the father of the modern *child-centric tendency* in education. In the words of Monroe, "With Rousseau for the first time, education finds its purpose, its process and its means wholly within the child life and child experience." The old conception of education, according to Rousseau, suffered from this defect that it aimed at moulding the nature of the child by thrusting upon him the customary ways of thinking, feeling and doing. It did not care for the natural and spontaneous reactions of the child but for the artificial reactions of intellectual, social and religious formalism. Rousseau pointed out that traditional education was all bookish, theoretical and stereotyped and it aimed at stuffing or loading the minds of children with facts and information. It was only a process of pouring in knowledge from outside but not a growth or development *from within.* It failed to 'quicken' the minds of children, as it was an imposition *from without.*

The most noteworthy and permanent contribution of Rousseau to education is his emphasis on the psychological *study of the child.* The child, according to him, is a symbol of purity and simplicity. It is innocence incarnate. The opening lines of *the Emile* bear testimony to this fact: "Everything is good as it comes from the hands of the Author of Nature ; everything degenerates in the hands of man." Had not Rousseau written any other single line, his name would still be famous in the history of education and would be handed down to posterity. These opening lines of *the Emile* constitute the key-note to Rousseau's philosophy of education.

The educational theories of Rousseau may be supposed to have been greatly influenced by his own life and character, and in fact, most of his views on education owe their origin to his early upbringing. After his mother's death Rousseau was brought up in infancy by his aunt whose affection for him far exceeded her wisdom. And we have said already that his father was of an unbalanced nature. Rousseau was sent to a school only to be expelled from there several times since he was *uncontrollable*. Later on, he was apprenticed to a trade but here he learnt more vice than anything else. He became an out and out vagabond and loved to live *'according to nature'*.

This early life had a great influence on his later writings, and he started giving out his views on education. He preached his views on *'education according to nature'*. But we shall be far from truth if we only criticize his educational theories as most unpractical and destructive, and understand him merely as a wild visionary, knowing nothing of reality. It must be admitted that Rousseau's educational theory has a critical as well as a constructive aspect. We are struck with wonder when we come across some of the most plausible and practical views on education in the midst of the apparently destructive and paradoxical thoughts of Rousseau. And those principles and theories are now applied in the educational doctrines and methods propounded and practised by the great psychologists and educators of modern times. It is true that Rousseauistic influence may be traced in the educational doctrines of the later reformers of education like Pestalozzi, Herbart, Froebel, Spencer, Montessori, Dewey and others who all drew inspiration from his thoughts, teachings and writings in some form or other. It may be observed, therefore, that in many respects Rousseau is a pioneer, a constructive thinker and a reformer but in some other respects, of course, he seems to be a reactionary.

In *the Emile* Rousseau aims to replace the conventional and formal education of the day by a training that should be natural and spontaneous. On the intellectual side education was largely traditional and consisted chiefly of a training in Latin grammar and words. Rousseau scathingly criticizes these practices and applies his naturalistic principles to an imaginary pupil named *Emile,* 'from the moment of his birth up to the time when having become a mature man he will no longer need any other guide than himself.' Indeed, *the Emile* has justly been called the *gospel* of childhood. If it had no other claims to consideration, it would deserve the homage of parents and teachers by reason of that sacredness with which it invests the personality of every child. "In what other book of human origin can we find such compassion for the weakness of childhood, such tender regard for its happiness and such teaching pleas for its protection and guidance" ? *The Emile* has made the ministry of the school-room as sacred as the ministry of the altar: and by unfolding the mysteries of his art and disclosing the secret of his power, it has made the teacher's office one of honour and respect. The power of the book lies in its general spirit rather than in any doctrine and method which it embodies. If read with kindly feeling and without any prejudice, it cannot fail to inspire our teachers with the noblest ambition and to quicken their methods with living power.

According to Rousseau, we are educated by *three* kinds of teachers, *viz.,* nature, men and things, acting in co-operation with one another. Rousseau points out that since the co-operation of these *three* kinds of educators is necessary for full perfection, it is to the one over which we have no control that we must direct the other two. While we may have control over man and thing, we cannot bring nature under control. Education of the child, therefore, must conform to nature, that is to say, it must be *natural.* It must come through the natural instincts and interests. Education is no longer a procedure, artificial, harsh, unsympathetic and repressive of all natural inclinations, but through allowing natural forces to have their way, it is the process of development into an enjoyable, rational, harmoniously balanced, useful and hence natural life.

Rousseau found that ordinary education had sacrificed childhood at the altar of knowledge. Children had been treated as if they were for school books and not their school books for them. The old and traditional teachers would think it a clear gain if they could anyhow drum into the ears of the children some forms of words, declensions, history, geography, astronomy and so on. Education was regarded as a preparation for a future state. As Quick observes: "Childhood has been treated as troublesome and unimportant though a necessary stage." The educators were very little anxious to know what children were capable of learning. The child was considered but a 'miniature adult', moved by the needs and interests similar in kind to those of the fully formed individual. Rousseau lays down that we must no longer, as in the past, pay our principal attention to the demands of the adult community as to what they consider it necessary that the child should learn; that is, the curriculum which always expresses the social demands of the time must no longer dominate the education of the child. The educator, therefore, whether parent or teacher, must endeavour to know and understand the nature of the child —his needs, his instincts, his natural interests; for these must be the starting point for all our methods of teaching. As Professor Hudson puts it: "Rousseau seized the truth that education should be progressive: that a real system of education must adjust itself to the unfolding needs of mind and character and that the common habit of treating the child from the first as if he were an empty adult to be filled up with information was a ludicrous and a fatal mistake". Hence we should pay more attention to and take greater interest in the study of the mental life and development of the child and we must endeavour to understand and classify the natural instincts and interests in their progressive order of development. But formerly the child was modelled on the pattern of his seniors. Monroe humorously remarks: "Previous to Rousseau's period the child was merely the adult viewed through the wrong end of telescope." Rousseau advised for the first time: "Study the subject you have to act upon." That is to say, in imparting education to a child the first and foremost duty of the educator should be *to know the child.* Hence Rousseau may be called, as Beatty says, the Copernicus of the educational universe, for he transferred the centre from the older generation to the child. Rousseau remarked long ago: "Nature wills that children should be children before they are men . . . Childhood has ways of seeing, thinking, feeling peculiar to itself. Nothing is more absurd than to wish to substitute ours in their place." Although his knowledge of children was defective and his recommendations were marked by unnatural breaks and filled with sentimentality, he was the first man to see the need of studying the child as the only basis for education. For instance, in the Preface to *the Emile* he declares thus, "We are always looking for the man in the child, without thinking what he *is* before he *becomes* a man. This is the study to which I have devoted myself to the end that, even though my whole method may be chimerical and false, the reader may still profit by my observation." As a result of such appeals, the child has become the centre of discussion in modern education. Despite his limitations and prejudices, this unnatural and neglectful parent stated many details of child development with much force and clearness and gave an impetus to later thinkers and reformers.

Rousseau revolutionized the idea of education. He maintained that education was life itself and not a preparation for a future state of life, which was remote in interest and characteristics from childhood. It may be pointed out in this connection that Dewey, too, long after Rousseau, advocated similar idea about the aim of education in maintaining that education is not a preparation for life but *life,* or *living* itself.

It would be pertinent for us to say a word or two about Rousseau's *aim* of education. According to him, education aims at *complete living*—which was also taken as the aim of education by Herbert Spencer later on. Rousseau says in *the Emile,* "To live is not merely to breathe.* * * * The man who has lived most, is not he who has counted the greatest number of years, but he who has most thoroughly felt life." There also goes a similar maxim, "We live in deeds, not in years." Elsewhere Rousseau says that Emile must learn a trade for livelihood. In Rousseau's opinion, *complete living* has for its purpose the development of the innate powers and capacities of the child, and instruction or acquisition of knowledge is a means to this end.

With Rousseau, as afterwards with Froebel, education was 'child-gardening.' "Plants are developed by cultivation", says he, "and men by education." Education is the *natural* development of the child's *innate* powers, capacities, abilities, inclinations, instincts and impulses. Hence he mentions, as already referred to, the *three* sources of education, namely, nature, men and things. "Education", he said, "must be *according to nature.*" Emile should hardly know what a book is. The governor who is the child-gardener, is to aim at *three* things. First, he is to shield the child from all corrupting influences ; secondly, he is to devote himself to developing in the child a healthy and strong body in which the senses are to be rendered acute by exercise ; and thirdly, he is, by practice and precept, to cultivate the child's sense of duty. Education is a development from within and not a coercion from without and as such should never be thrust from outside. One of the first requisites in the case of the young is to provide for the expansion of their activity. "There must be no other book than the world," says Rousseau, "and no other instruction than real facts."

The guiding principle of Rousseau's theories is 'education through doing'—a very sound scheme no doubt, for a child is naturally more impressed by knowledge gained through experience. Emile is to 'learn by doing'—he is to be taught nothing except through his own personal experience. The boy is left to amuse himself with anything he pleases, and has long talks with Rousseau about what he observes.

The present system of education was all wrong in being *positive,* as Rousseau declared. He substituted in its place *'Negative Education.'* Now, by this negative education Rousseau did not maintain that there should be no education at all. It does not imply a period of idleness ; but it rather means that 'there should be the provision for an education very different in kind from the accepted educational practices.' If a child is by nature good at birth, if the instincts, impulses, inclinations and feelings of which he is constituted, are good, why should any restrictions be placed upon his free development ? Intellectually, therefore, negative education means that there should be no verbal lessons ; the pupil should be taught by *experience* alone. Reading is characterized as the curse of childhood, whereas, if the desire to know is awakened in the child, he will learn of itself. *"Present interest*—this is the motive power—the only motive power which takes us far and safely. We learn nothing from a lesson we detest." Hence it has been said that until the child is twelve years of age he should be given no direct instruction but be left free to play with nature. "I call a positive education one that tends to form the mind prematurely and to instruct the child in the duties that belong to a man. I call a negative education one that tends to perfect the organs that are the instruments of knowledge before giving this knowledge directly; and that endeavours to prepare the way for reason by the proper exercise of the senses. It does not give virtue, it protects from vice; it does not inculcate truth, it protects from error. It disposes the child to take the path that will lead him to truth, when he has reached the age to understand it; and to goodness, when he has acquired the faculty of recognizing and loving it." As this time of childhood is the most critical interval of human nature when vice and error take root without our being possessed of any instrument to destroy them, the education of the child should be purely negative, as opposed to the old conception of positive education. Rousseau prescribes physical exercise for the child. Because, intellect is based on the senses. He says: "Exercise the body, the organs, the senses and powers but keep the soul lying fallow as long as you can. Let childhood ripen in children; childhood is the sleep of reason." While the old conception of education held that the senses were utterly untrustworthy and could not be made the basis of knowledge, Rousseau held that the first reason of the human being is the reason of *sensations.*

In the early stage, a child should be left free to do whatever he likes and should be brought into contact with nature, because a child learns more if he finds out for himself than if he learns anything from books or from conversation. Rousseau began with the presupposition that the child is born with all his instincts and impulses good. He has come into the world 'trailing clouds of glory'—

his soul is a 'sheet of paper white.' At this period he should be left entirely to himself. "The only habit that he should form is to form no habit at all." The child must be allowed to grow and develop naturally, and any tendency to thwart his inclinations and instincts might interfere with his natural growth. He should gain his knowledge from the natural environment and his morality should be left to the 'discipline of natural consequences.' "A burnt child dreads the fire"—goes the proverb. Rousseau firmly believed—and rightly so—in the free activity of the children and a good environment for the gaining of healthy impressions and knowledge.

Even the first incentive to reading comes to Emile when Rousseau is out one day and a letter arrives for Emile. The poor boy does not know that the letter is for him since he is unable to read and is perhaps not very curious about the contents of the letter. Rousseau returns, reads the letter and tells Emile that it was an invitation to eat straw-berries and cream at a friend's house that morning. Emile is sorely disappointed at having missed the feast, and then Rousseau tells him that it is a pity that he is unable to read. Emile now begs to be taught and henceforth whenever he wishes to give up learning he is reminded of the incident of the straw-berries and cream. By way of criticism we might, however, point out that Rousseau here gives the child an entirely material outlook—there is no urge to learn *for learning's sake* or to better appreciate the beauty of good literature; the appeal is made here to the baser and not to the nobler feelings of the child.

Emile must learn about his environment and also must know how to act when he is lost anywhere. The chief object is to make him independent of any one's aid, to teach the boy how to depend on his own self for everything. To this end Rousseau takes the boy for a long walk, and when they are in the midst of a vast and dense forest, Rousseau declares that they are lost. Emile, tired and dispirited, begins to cry but stops when Rousseau tells him that that will not help. Emile is certain that he can recognize a farm house if he happens to see it. How are they to get a glimpse of the country-side ? The expedient of climbing a tall tree is hit upon ; a farm house is recognized at some distance. What would have happened if they were in a foreign country ? Emile learns how to guide himself by the stars and the sun. In this way he learns the rudiments of Astronomy and knows the direction-finding and the use of the compass.

Emile is quite a big boy now and is taken to live in towns where he meets with dishonest people who strip him of all he has. He learns then how to defend himself against tricksters and not to trust any one. He associates with evil companions, and his own innate goodness is supposed to make him turn away from evil in disgust. He is now sent on a tour for the widening of his experience and to complete his education. On his return, he is married to Sophie who has been trained just as carefully as he, but in the opposite direction. She has been repressed so as to make her entirely dependent on her husband. This is supposed to make Emile bring all his efficiency to the fore—he must himself direct and decide everything.

He is a perfect specimen of what man ought to be, knowing the remedy for every possible difficulty and capable of carrying it out successfully.

Rousseau divided the human development into *four* well-marked stages, and these four stages constitute the first four Books of *the Emile.* To these four Books he added a fifth one with the caption *'Sophie'* where he discussed the education of women. In this connection, it is to be observed that Comenius long ago spoke of different grades of instruction or certain well-defined periods of education. Rousseau in this respect is indebted to Comenius for dividing the life of Emile into *four* stages, *viz.,* (i) from the age of one to five, (ii) from five to twelve, (iii) from twelve to fifteen, and (iv) from fifteen to twenty.

(*i*) The *first* stage of life ranges from the age of *one* to *five.* This is the period of early infancy. This stage must develop the *senses* of the child and give him a wide experience of outdoor life. The training of the senses is the best part of education now, because 'senses are the gateways to the mind or the windows of the soul or the mind's first schoolmasters'. This sensory training will give the child first-hand contact with things, which is so useful for education. For the purpose of sense-training and sense-experience, the child must be taken to the country and be made to observe the natural surroundings in detail and with care, and be allowed free scope and expression of all his natural inclinations and desires.

During this period great stress must be laid on physical development of the child and on games and sports and outdoor activities. Rousseau observes, "The weaker the body, the more it commands: the stronger it is, the better it obeys. All sensual passions find lodgment in effeminate bodies. * * * * All wickedness comes from weakness. A child is bad only because he is weak; make him strong and he will be good." It is to be noted in this connection that in respect of emphasizing the need of physical development Rousseau is in perfect agreement with Locke.

Emile should be taken away from home and reared and educated in a country-side far away from the 'din and bustle' of the city life, because 'cities are the graves of human species'. Emile should be taught under the guidance of a well-chosen private tutor whose will should reign supreme.

(*ii*) The *second* stage (from *five* to *twelve*) is 'the most critical period of human life' and is to be controlled by *two* principles. (*i*) The *first* is that education is to be negative, and (*ii*) *secondly,* moral training should be imparted through *natural consequences.* Even now the child will know nothing of books and his mind should be allowed to remain passive. Rousseau observes, "I hate books; they only teach people to talk about what they do not understand". The boy is yet to be free—he should be allowed to live in the country far from the contaminating influence of the town. He should be made to walk bare-footed, with his head uncovered, and with scanty clothes. Moral training should be imparted through examples and suggestions, because the child is incapable of abstract thinking. "Example is better than precept"—goes the proverb. All we should aim at is to see that the boy develops into a 'healthy animal' as Rousseau words it. At this stage also the child is to develop a full control of his muscles by games and healthy amusement of all kinds and by open-air exercises, being left free for the greater part of his time. He will thus naturally develop to his full capacity, and by questions and answers and by means of story-telling he will gain knowledge of the world.

(*iii*) The *third* stage deals with the child from *twelve* to *fifteen* years. This stage sees the child eager to mix with his fellows and companions. The 'herd' instinct is very strong at this stage and the child must be allowed to act and think with his community. His social development must be guided on right lines. At this stage of adolescence his instinct of curiosity is highly strong, and hence satisfactory outlet must be given for it by teaching him subjects like Geography, History, Literature and Science. Geography must be taught by the observation of his environment in the fields and the woods. History is to be taught by means of stories chiefly to do with travels and adventures. Astronomy may be studied by the watching of the heavenly phenomena, Botany by the seeing of plant kingdom, Physics and Chemistry by observation and experiment, Literature by conversation, and so on. Rousseau's idea of teaching these subjects was indeed very correct. Subjects, he said, should be based on the immediate and past *experiences* of children. Rousseau says that hitherto Emile's muscular powers have far exceeded his intellectual powers and now he will begin the training of his intellect. But, of course, the unnecessary studies should be discarded and only the essential thing is to be taught. Now may also begin the social training of the boy. Among other things, Emile must learn a trade mainly for social and economic reasons, for providing a livelihood and enhancing the dignity of labour, developing skill and keeping the body sufficiently exercised. Locke and Froebel also advocated the learning of a trade on the part of a child, not for the sake of earning bread but mainly for its recreational, artistic and expressional value.

(*iv*) The *fourth* stage ranging from the age of *fifteen* to *twenty* is the period of late adolescence and is the stage for the formation of heart and intellect. Hitherto, Emile's body, senses and brain have developed and hitherto he has been trained solely by himself and for himself; self-love, self-perfection and self-development have been the ruling principles. "Now the youth is to be educated for life with others and is to be educated in social relationships. Love for others becomes the controlling motive; emotional development and moral perfection the goal." Emile should learn to look to the motives and properties of other people. He should learn such subjects as will be useful in later life, and his liberty ought not to be restricted and he should be guided by reason. Moral training and discipline should come as results of the consequences of acts. If a child does anything wrong, he should correct himself by seeing the results of his own acts.

Rousseau deals with the education of women in the *fifth* and last book of *the Emile*. Here he introduces the girl Sophie who is wedded to Emile. According to Rousseau, Sophie should be kept under control and be taught such subjects as will be useful to her for keeping the house. Rousseau, while he prescribes 'negative education' for the boy giving him as much freedom as possible, believes that girls' education must be rigid. Sophie must be trained in domestic work—she must have just enough knowledge to be of help to her husband. She must be trained to meekness and obedience and must do things whether she likes doing them or not, and must be brought up under stern discipline. Rousseau vehemently opposed girls' education saying: "A woman of culture is to be avoided like a pestilence. She is the plague of her husband, her children, her servants, everybody."

Let us now add a few words by way of evaluation and criticism of the educational views and theories propounded and preached by Rousseau.

Rousseau's philosophy of education is a curious blend of both *naturalism* and *idealism*. Rousseau's naturalism is of a *unique* nature. Rusk is right in maintaining that Rousseau, in the philosophical sense of the term, is *not* a naturalist, because, "Nature for Rousseau is not opposed to reason or spirit but to *convention*". Like modern idealists he seems to do justice to Nature and to give it its rightful place in the scheme of things. And, as we have said already, Rousseau's educational doctrines have both critical and constructive aspects. His scorn for the then social conventions and his plea for a life of nature made a deep impression on the people, and they were roused from their slumber, as it were.

So far his work was invaluable. His bitter sneering condemnation of the corrupt hypocritical and fashionable life of his time and his eloquent plea for a return to a life of nature and a life truly and simply human, and to an education based upon the principles of human nature were all well-thought out. His purpose was thoroughly right and he knew how to make himself heard in giving expression to it. But when he came to inform the world in detail how this purpose was to be carried out, he undertook a task for which he was not fitted either by natural endowment or by education and training.

Dr. Graves at the very outset of his discussion remarks: "The inconsistencies and contradictions of Rousseau were almost proverbial." On the one hand, he holds that society is corrupt and degenerate, while on the other, he puts great faith in the goodness of *individuals.* Emile is taken away from home and lives an isolated life in the country under the care of the private tutor whose will should reign supreme. But it may be contended that the importance of home influence as well as of social influence is also great for the wholesome development of the child. Moreover, no state or society can afford the private tuition of individuals. Hence this sort of education has been criticized as *anti-social,* because children cannot be reared up in a 'social vacuum'. R. H. Quick humorously remarks, "It would be like writing a treatise on the rearing of a bee cut off from the hive!"

Then, again, Rousseau's view about 'discipline by natural consequences' cannot be categorically accepted in as much as it may sometimes lead to fatal or dangerous consequences.

His programme of women's education also is open to severe criticism. Women should never be taught only domestic duties and house-keeping for the purpose of pleasing men. Rousseau underestimates the intellectual calibre and worth of the women-folk.

Rousseau was absolutely opposed to book-learning, and he exaggerated the value of personal observation and inference. By doing this, as Dr. Graves says, he robs the pupil of all experience of his fellows and those who have gone before. We may meet this objection by saying that Rousseau emphasized physical activity and self-effort as a means to growth and intellectual development of children at a time when *observation* in elementary education was not considered to be important.

Another point of criticism raised against Rousseau is that he, after settling Emile and Sophie into their homes, wishes to leave them. But Emile with tears in his eyes begs him to remain. "Who will train the children ?"—he asks. So we find that Emile inspite of his training is incapable of looking after his own family and bringing up children, and remains ever dependent upon Rousseau.

"Each child must have its own tutor"—was Rousseau's idea. What would have become of the present generation, had this idea been put into practice ? The tutor had to keep the child with him always and be his guide in all matters. The world would have, indeed, been a sorry place had this idea had any weight.

Rousseau's ideas are supposed to be purely theoretical and sentimental but never practical. Inspite of this objection we may note that it is for Rousseau that education finds its purpose, process and means wholly within the child-life. All of the pregnant reforms of Pestalozzi, Herbart and Froebel owe their origin to Rousseau. Of Rousseau's educational demands at least *three* have been responded to: (*i*) the demand that children should from the moment of their birth be allowed complete freedom of movement ; (*ii*) they should be educated through direct *experience* and not through mere information derived from books ; and (*iii*) they should be taught to use their hands in the production of useful articles. For these reasons Rousseau may be said to be the intellectual progenitor of Pestalozzi, Herbart, Froebel, Spencer and many other modern reformers. He points the way for the Herbartians in that he advocated that curiosity and interest are to be used as motives for study. It is likewise due to him primarily that we have recognized the need for physical activities and sense-training in the earlier development of child as a foundation for its later growth and learning. To these recommendations may be traced much of the object-teaching of *Pestalozzianism* and the motor expression of *Froebelianism.* Thus Rousseau may be said to be the precursor of the modern psychological movement in education. And, in fact, the methods of Maria Montessori, one of the greatest educationists of our times, may be said to be entirely based on Rousseau's doctrines. The principles underlying her methods may be traced to what Rousseau had preached about two hundred years ago.

It must be admitted, however, that it takes time to find for great thoughts the practice which gives effect to them. Rousseau's theories of education also were not practised or appreciated during his time. "The course of great thoughts," as Quick says, "is in some ways like the course of great rivers." They are most romantic near their source but not useful. They must leave the mountains and flow down smoothly along the plains, among the dwellings of common men. But it takes time. Rousseau was the fore-runner of modern education, and he had followed in the trails he blazed until they have become the broad highways of common travel.

As the author of *the Emile,* the great epoch-making work, as the father of the French Revolution, as a great critical thinker, as the most prominent reformer in the field of education, Rousseau's genius is extraordinary. His is one of the original voices that go on sounding and awakening echoes in all lands. In the history of education, this much-despised revolutionary,—an exile from home till death, will continue to hold the most sublime and supreme position for ever.

Jean Jacques Rousseau was an outstanding figure of the eighteenth century European history, who may be said to have ushered in a new era in every department of life. In every branch of human intellectual activity—in politics, in religion, in literature and in education, modern age seems to have begun with Rousseau. True it is that he simply voiced forth the ideas current in the atmosphere of the day; but he was the first man to feel most strongly the burning problems of the age, to think most definitely over them and in the right direction, and to act with a strong determination.

It has been rightly said that no one who reads *the Emile* but will quarrel with some of its pages; no one who does so, having at heart the real education that is not in books or in rules, but in the actual commission of life itself, will fail to understand why *the Emile* is called the *Child's Charter,* and to draw wisdom from it. *The Emile* of Jean Jacques Rousseau is, indeed, a veritable mine of ideas. This treatise is just a *symbol* demonstrating how Rousseau sought to emancipate the child from the trammels of the ignoble and depraved society and also from the fetters of rigid mediaeval restraint.

CHAPTER 4

Pestalozzi, the Pioneer of the Psychological trend in Education (1746-1827)

JOHANN Heinrich Pestalozzi was born at Zurich, Switzerland in 1746. His father, a medical practitioner, died prematurely when Pestalozzi was only five years old. He was then brought up with a brother and a sister by his widowed mother who was a pious, generous, affectionate and self-denying lady. She was assisted in this task of rearing her children by a gentle, faithful and devoted servant Babeli, 'who had comforted the father in his last hours by promising to stay with his family'. Being thus reared in a fatherless family with the 'sympathy, watchful care and loving insight' of a mother, Pestalozzi had enough scope for home affections which were denied to Locke and Rousseau. The genial family environment in his early days tended to develop in his heart a profound love of and ample confidence in mankind, and he dedicated his whole life to the cause of the suffering humanity. R. H. Quick humorously speaks of Pestalozzi thus, "His *head* was not developed before his *heart*."

Besides the warm affection and selfless care of the mother, the gentleness and devotion of the loyal servant Babeli and the example of his grandfather, a pastor of a neighbouring village, greatly inspired Pestalozzi with the noblest idea of self-sacrifice and generosity for the amelioration of the condition of the poor, neglected and degraded peasantry.

The example of Pestalozzi's religious-minded grandfather exerted a powerful influence on his life and character so much so that he wanted 'to follow in his steps', and in fact, he became a student of Theology. As a schoolboy, Pestalozzi would frequently spend his holidays with his grandfather who lived in a village some three miles away from Zurich. Here he visualized the actual condition of the 'rural poor' and how the children suffered from working in factories. And this experience made him think as to 'what a good man could do for them'. Pestalozzi, in his later years, fondly called back to his mind those holiday visits to his grandfather as 'important element in his education'. He wrote, "The best way for a child to acquire the fear of God is for him to see and hear a true Christian."

The boy did not learn much at the Elementary and Latin schools. But "even as a student Pestalozzi proved that he was no ordinary man." Some of his distinguished professors of the little Swiss University, especially Bodmer, wielded a profound influence upon him by awakening in him 'a craving for the old Swiss virtues of *plain living and high thinking*', and by inducing him to hate luxury, wealth and material prosperity.

In 1769, Pestalozzi began an experiment. He tried to demonstrate to the peasants the value and utility of 'improved methods of agriculture'. He took up a piece of waste land at Birr, to which he gave the name *Neuhof* ("new farm"). But this experiment did not meet with desired success and was subsequently abandoned.

In the meantime a son was born to him, and the birth of this child generated in him a desire to rear him up on the basis of *the Emile.* He actually brought up his young son in accordance with the principles laid down by Rousseau in *the Emile.* The results of his training were recorded in his book, *'Father's Journal'* where Pestalozzi suggested some new theories and principles for the upliftment of the masses. He maintained that education does not merely mean book-learning and acquisition of knowledge. The children of the poor can be trained and educated in such a manner that they are enabled to earn their living and at the same time they can develop their intellect and improve their moral character. Thus, the failure of his agricultural experiment at *Neuhof* gave him an opportunity 'to experiment with philanthropic and industrial education'.

Pestalozzi's practical nature inspired him to start one school after another and apply his educational ideas into actual practice. In 1798, he started the 'Poor House'—an Orphan Home and School at *Stanz* and took into his hands the management of this institution. Here he carried on experiments in *community living* with a number of unclaimed destitute children whom he wanted to reclaim and rehabilitate. But unfortunately, on account of certain difficulties, the principal of which was the lack of co-operation, assistance and encouragement from the local public, the Orphan School had to be closed and the experiment given up shortly afterwards.

In 1799, he joined the post of an assistant teacher in an Infant School at *Burgdorf* and served there for some years, experimenting with success on *Activity Methods* and *Observation Methods* in Elementary Schools.

Later on, Pestalozzi started another school at *Yverdun*. This institution was intended to impart training to the teachers and aimed at experimenting on the reforms of education conceived of and formulated by him. He stayed here for long twenty years from 1805 to 1825.

When we study the educational doctrines propounded by Pestalozzi, we are convinced that traces of Rousseauistic influence were as prominent on Pestalozzi as on many other later reformers of education. Like Rousseau and other Renaissance and Post-Renaissance educationists of the *Naturalistic School* of thought, Pestalozzi, too, considered education from the point of view of the *developing mind* of the child, that is, he wanted to *psychologize* education. He said, "I wish to psychologize education and instruction."

"The psychological tendency in education comes from Rousseau as the direct outcome of the Naturalistic Movement deriving all its educational theories from the *nature* of the child, but it is best known as the *Pestalozzian Movement*". As a matter of fact, it was Pestalozzi, the great Swiss schoolmaster, who first made the public in general and the educators in particular conscious of the importance of the all-round *sympathetic study* of the *nature* or *mind* of the child in determining the method of education. Herein lies the credit of his being called the fore-runner in the *psychological movement* in education, which has revolutionized the theories and practices of education since the middle of the nineteenth century. As Monroe puts it, "Made theory by Rousseau, made practice by Pestalozzi, *sympathy* with the child, intellectually, morally and physically has come to be recognized as an essential element in the educative process."

Pestalozzi was disappointed at the sad plight of the existing school system which was far from satisfactory. The schools were under the dominating influence of the church. Old and traditional methods of teaching still prevailed. He was further aggrieved to find that there existed a wide gulf between the rich and the poor, between the privileged class and the common mass of people, and there were no educational institutions for the lower classes of people in the society. So he made up his mind to put an end to this horrible state of affairs and improve the lot of the poor and ordinary people. He formulated the following fundamental principles of *reform*:

(*i*) Reform must start with the individual.

(*ii*) The individual should be trained to self-help and self-respect.

(*iii*) Education must aim at developing the latent powers and capacities of the individual.

Pestalozzi's life and experience in childhood and the genial home environment naturally gave him softness of heart, love, affection, kindness, sympathy, etc. This made him appreciate the importance of *good home* in the early education of children, in a more real way than any previous educator had done. He said that the children should be educated in an atmosphere where they can get the care, comfort, grace, gentleness, generosity and patronage of the parents. The school, according to him, should be a *'transformed home'* and there should exist no gulf between the home and the school. In the book *'The Evening Hours of a Hermit'* (1780) we come across aphorisms like these: "Home should be the foundation of any natural scheme of education." "Home is the great school of character and citizenship." He also wrote in his treatise, *'Views and Experiences'* thus—"From childhood it lay in the peculiarity of my character and of my home training to be benevolent and kindly and to have unlimited confidence in those about me. I came early into association with the suffering and the poor, and in a thousand experiences with them, came to feel the deepest sympathy with them and their many sorrows; and I likewise came to feel the urgent call to attempt to improve the multifarious causes of the evils which they endured."

The *sociological* interest is indeed prominent in Pestalozzi's writings. He not only wanted to psychologize education but also *socialized* it so as to make it the chief means of social reform. He also *democratized* education by miantaining that all people, high or low, rich or poor, men or women, have a just claim to education. Pestalozzi felt particularly for the poor and degraded children and himself led the life of a *farmer*. As we have said already, he started a school for the children of farmers and himself taught there as a teacher.

On witnessing the miserable condition of the lowest classes of peasants he asked himself what they needed for being raised up. He opined that knowledge would not do. The thing was not that "they should know what they did not know, but they should behave as they did not behave, and the road to right action lay through right feeling."

Pestalozzi tried to improve the lot of the peasantry by giving them education. Education, according to him, was the birthright of all, and its aim was the 'natural, progressive and harmonious development of the powers and capacities of the human being.' Education did not mean to him mere *book-learning.* It consisted in *right thinking* and *right living* of the individual both for his own good and for the good of the society at large. In Pestalozzi's theory, education is both a social as well as an individual process. It is necessary for self-development of the individual and also for the betterment of the society. With this conception of education, Pestalozzi's chief interest remained in the 'simplification of instruction and domestication of the people.'

Pestalozzi took into his house at *Neuhof* some of the very poorest children and brought them up in an atmosphere of love and instructed them in field work and spinning. He treated them as his own sons. It was found in a few months' time that the appearance of these children totally changed and 'their faces gained an expression of cheerfulness, frankness and intelligence which till then had been completely wanting in them'. This experiment of Pestalozzi greatly attracted the attention of the public to whom he made an appeal thus narrating his experience, "I am convinced that when a child's *heart* is touched, the consequence will be great for his development and his entire moral character." Later on, he wrote in *'Leonard and Gertrude'* (where he described peasant life) thus, "I desire nothing else now as the object of my life but the welfare of the people whom I love and whom I feel to be miserable."

This treatise, *'Leonard and Gertrude'*, an educational romance like *the Emile* of Rousseau, was Pestalozzi's masterpiece and brought him immense fame and renown. The story element in brief may be stated thus: *Gertrude* was conceived of as a dutiful, pious, good-natured and practical woman, an *image* of Pestalozzi's affectionate mother. But *Leonard,* her husband, was of an opposite nature—a man of an indifferent and unprincipled character, given to the vices of drinking and not at all helpful to the family in any of its work. Now, the couple had children. Who would educate them ? *Gertrude,* without any kind of encouragement or assistance whatever from her husband, gave her children the best possible training and education. She carried out her plan so efficiently and marvellously that ultimately *Leonard* was greatly moved and was induced 'under the compulsion of moral force' to correct his ways of life. This incident attracted the notice of the whole village and wielded an extraordinary influence over the people, who were also reformed as a result of the reform occurring in this single family. The reform was not only confined to the village but spread far and wide. Thus, the life and example of this devoted lady could wonderfully bring about reforms in the family, the society and the country at large.

This book written in *German* was very highly and widely appreciated by those interested in education. Pestalozzi continued here, "You should do for the children what their parents fail to do for them. The three R's are not, after all, what they most need. It is all good and well for them to *learn* something but the really important thing for them is *to be* something. When this truth will be fully realized by teachers and school managers, there will be some hope for *national education*".

Pestalozzi felt that the traditional education does not develop the noblest parts of child's nature. On the other hand, it brings to the child some knowledge, ideas and feelings of others. Current education, Pestalozzi observed, did little beyond stifling the child's individuality under a mass of *borrowed ideas.* In the words of Quick, "The schoolmaster worked, as it were, from *without* to *within.* This Pestalozzi would change and make education begin *in the child* and work *from within outwards.* Acting on this principle he sought for some means of developing the child's inborn faculties."

This new schoolmaster made all instruction start from what children observed for themselves. He remarked, "I laid special stress on just what usually affected their *senses.* From the very moment that the child's senses open to the impressions of Nature, Nature teaches it. So the sole instruction given to the human being consists merely in the art of giving a helping hand to this natural tendency towards its proper development." Thus Pestalozzi wanted to *psychologize* instruction and education and 'sought to make instruction fall in with the eternal laws which govern the development of human intellect.' His conception of instruction and education differed widely from those of the 'teaching profession.' He tried to understand thoroughly the mind of man together with the laws of its development, 'human affections and the art of arousing and ennobling them.' Education, in Pestalozzi's opinion, should consist in 'continual benevolent superintendence, with the object of calling forth all the faculties which Providence has imparted.' The educator's task, therefore, is to superintend and promote the child's full-fledged development.

Pestalozzi attached great importance to the *method of instruction* because he felt that the poor, degraded masses could be best educated and consequently best served through an effective process or method of instruction. His conception of the process of education has nicely been analysed by Monroe in the following words: "Education is the process as well as the means of bettering society; education is ever to perform more for the individual than to give him the rudiments of learning; it is to assist him *to be* something for himself and *to do* something for others." Pestalozzi was in full agreement with Rousseau in viewing education from the standpoint of the *developing mind* of the child, that is, from the point of view of *child development.* The subject-matter and its mode of presentation and exposition, according to him, should conform to the level of *maturity* of the pupils. In his opinion, there are hidden in child's mind innate or inborn faculties and capacities that require *unfoldment* or manifestation during life. Education, therefore, is nothing but the development of the intrinsic or innate powers and tendencies. This reminds us of the definition of education put forward by *Swami Vivekananda*: "Education is the manifestation of the perfection already in man." The importance of knowledge consists in its acquisition by the child himself through his own discovery and power of self-effort.

Inspired by the political writings of Rousseau, Pestalozzi regarded education as the only panacea for relieving and elevating the degraded humanity. Rousseau's great classic, '*The Emile*' made a deep impression on Pestalozzi. He wrote in his '*Swan Song*', "My own visionary tendencies were stimulated to a pitch of extraordinary enthusiasm when I read that *dream book* of his. I compared the education which I had received at home and at school with that which Rousseau demanded for Emile, and I felt how wretchedly inadequate it all had been."

In his general conception of the nature and aim of education, Pestalozzi was essentially a disciple of Rousseau, but his chief merit lay in supplementing the work of his great master upon the constructive side to reform the corrupt society by proper education and an effective method of teaching. The suggestions advanced by Rousseau in *the Emile* for a *natural* training were mostly extreme and sometimes unpractical. His *naturalistic doctrines* aimed chiefly at the destruction of the artificial society and the education of the times. Pestalozzi was the *first modern schoolmaster* "to make positive and concrete the negative and general educational principles enunciated by Rousseau." According to Pestalozzi, the ultimate aim of education is to make man happy and virtuous by means of the harmonious and balanced development of his entire individuality and personality. Or, in other words, education has for its goal or end an *all-round* development of the individual—physical, mental and moral. Pestalozzi particularly emphasized moral and religious training like Herbart, as we shall see later on.

As regards the subjects to be studied by the pupils, Pestalozzi had in view their actual *needs* and requirements of life. The needs are two-fold: (*i*) *physical,* and (*ii*) *social.* With a view to meeting the *physical* needs he recommended the inclusion of subjects like agriculture, commerce, etc. and also provision for industrial training for 'gainful occupations' in future. This reminds us of Rousseau who wanted *Emile* to learn a *trade* for earning livelihood. And, the *social* needs justified the demands of subjects like Civics, Ethics, Religion, etc., which impart a training in citizenship and teach the pupil good breeding, manners and morals. But at the same time Pestalozzi thought of curriculum in terms of pupils' *immediate* needs as distinguished from their remote future needs of life. Such needs demanded the culture and development of the Head, the Heart and the Hand (3-H's). Pestalozzi believed that if a child receives proper training and practical education for everyday life, he will surely grow into a useful, worthy and efficient citizen. Of course, training of senses was emphasized by him in early stages of education. The psychological method of Pestalozzi was based on first-hand contact with things in the immediate neighbourhood of the child, which, again, depends on training in careful *observation* of objects.

Unlike Locke, Pestalozzi was by temperament very much 'in earnest'. He was opposed to the view that lessons are to be given to children in the guise of 'amusement', or that the teacher's 'fun' or 'joke' is essential for instructing children. To quote his words,—"I am convinced that such a notion will for ever preclude solidity of knowledge, and, for want of sufficient *exertions* on the part of the pupils, will lead to that very result which I wish to avoid by my principle of a constant employment of the thinking powers. A child must very early in life be taught the lesson that *exertion* is indispensable for the attainment of knowledge."

Pestalozzi was also of the opinion that when pupils are not interested in the lesson or cannot derive pleasure or feeling of satisfaction out of it, it may be presumed that the teacher has not been able to produce *exertion* on their part and attract them. He says, "Whenever children are inattentive and apparently take no interest in a lesson, the teacher should always first look to himself for the reason."

Now, we should say a word or two about Pestalozzi's conception of *discipline*. His idea of discipline follows as a corollary from his conception of school as a *'transformed home'*. Discipline, according to Pestalozzi, should be based on and controlled by love and mutual understanding. The relation between the teacher and the taught must be established by *love*. Love, affection, sympathy, kindness, co-operation, etc. are the qualities and virtues that are to be cultivated by all means by the pupils. The chief incentive to right actions, says Pestalozzi, is not fear but *love*.

Although Pestalozzi was influenced by Rousseau's writings he accepted his master's doctrines with important modifications and thus made their universal application possible. Both Rousseau and Pestalozzi emphasized the study of *child* and the teaching of the child rather than the study of books and the teaching of the subject-matter. Like Rousseau, Pestalozzi was imbued with the idea of the child being the centre of the educative process. But Pestalozzi went beyond the individualism of Rousseau in perceiving the dependence of the child on society for his all-round development. Again, Rousseau aimed at replacing the conventional and formal education of the day by a natural and spontaneous process of education 'based on natural desires and instincts', while Pestalozzi sought to adapt the course of nature to the aim of education.

Out of his revolutionary instead of reformatory reaction to the traditional and artificial system of education of the times, aimed to build the nature of the child by thrusting upon him the 'customary ways of thinking, of doing and even of emotional reaction', Rousseau went so far as to glorify the 'noble savage' and put forward his theory of *Negative Education,* leaving the child free to play with nature upto twelve years of age and he wanted the conduct of the child to be determined by the *natural consequences* of his own actions. But first and foremost a practical teacher, Pestalozzi realized the difficulty and danger of leaving education merely to blind nature, and discipline to natural consequences *as such*. He, therefore, published another book, *'How Gertrude Teaches Her Children'*. The publication of his previous book *'Leonard and Gertrude'* was not appreciated by the reading public as actually a treatise on *Education*. It, however, became famous only as a 'descriptive novel'. The present publication, *'How Gertrude Teaches Her Children'* embodied Pestalozzi's enunciation of Principles of Education and also contained an exposition of his Methods of Teaching. Here Pestalozzi observed, "The art of instruction must take the cultivation of our race out of the hands of Nature or rather from her accidental attitude towards each individual in order to put it in the hands of knowledge, power and methods which she has taught us for ages, to the advantage of the race."

Before his death he wrote two of his famous works, namely, (*i*) *'The Swan Song'*, and (*ii*) *'My Experiences'*, which depict a clear exposition of his educational ideas and views.

The real greatness of Pestalozzi lay in this that while Rousseau was mainly a *theorist* who could hardly make a practical application of *all* his educational principles, Pestalozzi actually started schools for children, where he carried on experiments in educational theories and practices. And as a result of experimentation he accepted or rejected the thories according as they proved fruitful or otherwise; or, wherever necessary, he modified the doctrines in the light of his own experience. While Rousseau had the intention of making education *natural,* Pestalozzi wanted to make education *conform to nature.* Herein Pestalozzi is said to have made a marked advance upon Rousseau's educational thought. It is admitted on all hands that Pestalozzi was a source of great inspiration to many of the later thinkers and reformers of education like Herbart, Froebel, Spencer, Montessori and others. His pedagogical experiments with little children and his method of training through *sense-perception* have greatly influenced the recent curricular trends in education and modern methods of teaching in elementary schools all over the world.

CHAPTER 5

Herbart, the Originator of the Formal Steps in Education (1776-1841)

JOHANN Friedrich Herbart was born of a highly cultured and educated family of Oldenburg, a city in north-western Germany, in 1776, some ten years before the beginning of the French Revolution. His father, a lawyer and privy councillor, was 'a man of moderate ability and complete trustworthiness but rather staid and conventional'. His mother, who was the daughter of a physician, was a talented lady with extraordinary qualities and as such, made up for her husband's 'lack of colour'. "She was energetic, ambitious, intelligent, dominating and so unconventional as to be eccentric." She was well-versed in Greek, Mathematics, and Music. She herself directed her son's early education at home upto the age of twelve, by engaging private tutors to instruct him. It is said that the mother also attended the lessons given by the private tutors to Herbart partly with a view to learning the material so that she could further assist her son in his studies and mainly to guard him against any untoward ideas or influences affecting him. It is also said that she even accompanied her son to the University! Being thus taught by private tutors under the direct supervision and guidance of the mother, Herbart made extraordinary progress in studies and mastered Physics, Mathematics, Music, etc. quite early in life. He read Logic at the age of eleven, and Metaphysics at twelve. He also read Kant at sixteen. "The boy was not entirely cut off from others of his own age, but he was with *adults* more constantly than most children are, and he developed *adult* ideas and attitudes while he was still a child." It is certainly wonderful that at the age of fourteen Herbart wrote an essay on an abstract metaphysical subject entitled, 'Concerning the Doctrines of Human Freedom', and at seventeen he delivered a learned lecture on a difficult ethical topic, 'Concerning the Commonest Causes that Affect the Growth and Decay of Morality in Various States'. At first he prosecuted his studies in Oldenburg *Gymnasium* where he was known to be an exceptionally gifted and brilliant boy and was very soon ranked among the boys three or four years senior to him.

At the age of eighteen he entered the famous University of Jena to study Law. But soon he discontinued this study, and coming under the influence of the great idealistic philosopher Fichte, he dedicated himself to serious study of Philosophy. But Herbart soon 'outgrew Fichte's idealism' and developed an independent philosophical creed of his own. At the age of twentyone he left the University and began to act as *private tutor* to three boys, aged eight, ten and fourteen, in the house of a Swiss nobleman, Governor Von Steiger in Berne. Herbart made one condition of the acceptance of the tutorship, which was to be allowed to keep a full record of the progress of these pupils every two months. This experience of instructing children in private capacity proved highly valuable to him in as much as it had served as the foundation of all his later pedagogic views and writings and contained the germs of his elaborate system of education and psychology. He now felt that Pedagogy was no less interesting than Philosophy. While tutoring these three boys, Herbart propounded his educational doctrines as a result of careful analysis of his experience with the pupils. His way of looking at educational problems was based on both philosophy and experience. As for instance, he now learnt to recognize the fact of *individual differences* among children and to pay due regard to their respective age-levels and their requirements. "He also sought, by means of his favourite book, the *Odyssey,* to develop in them the elements of morality and a '*many-sided interest*'." In one word, this tutoring experience was the real basis of Herbart's pedagogy.

In the year when Herbart finished his tutoring work, he visited the *Burgdorf Infant School* of Pestalozzi with a view to obtaining more information and knowledge in *Pedagogy* in which he had become deeply interested by now. He made an 'appreciative study' of *Pestalozzianism* and the psychological methods and aim of education and wrote a critique on the same: *Pestalozzi's Idea of an ABC of Sense-Impression* (*Anschauung*), published in the year 1802, to the second edition of which, he appended, later on, his work, *The Æsthetic Presentation of the World as the Chief Business of Education.* Soon after this, he published his chief educational treatise, *General Principles of Pedagogy Deduced from the Aim of Education* (1806). In 1809, he was called to the Chair of Philosophy and Pedagogy in the University of Königsberg, which was held by the Philosopher-Sage Immanuel Kant. Here he worked for about twentyfive years, developing his philosophy as well as pedagogy on all sides, but dedicating himself particularly to the 'elaboration of a new mathematical psychology'. Herbart did not only lecture on Education in the Seminary of Pedagogy, but established an *Experimental School* (which later developed into a Training College). Partly out of love for children but mainly 'to supplement the lecture course', he used to teach in this Demonstration School for one hour a day. During this time he brought out his masterpiece, *Umriss Pedagogischer Vorlesungen* (*Outlines of Pedagogical Doctrines*). The publication of this famous treatise led to his fame and renown as an acknowledged authority on the science of Pedagogy.

Thus we find that Herbart was as great a teacher as he was a philosopher ; or, rather like Plato, he had been an educator before he became a philosopher. We shall see later that John Dewey, too, was an educator before being a philosopher. It is said that Pestalozzi, the great Swiss schoolmaster, psychologized education and instruction. But it is a fact that Herbart placed greater emphasis on the importance of Psychology in the domain of education than Pestalozzi. Herbart combined the *three,* namely, Philosophy, Psychology, and Pedagogy simultaneously. The happier and more correct statement would be that Herbart not only psychologized education but also philosophized it. Of all the great teachers of the world, Socrates and Herbart, were 'the ones with the most strongly *philosophical* turn of mind'. Both of them made eminent contributions to 'specific *methods* of instruction' that are still used today, *viz.,* the Socratic method and the Herbartian method. It is said, therefore, that Herbart *psycho-philosophized* education. He remarked, "Pedagogy is a science based on practical philosophy and psychology. The former points out the aim of culture, and the latter the way, the means, and the obstacle."

It may be asserted that Herbart's educational theories are nothing but the elaboration and development of the principles of Pestalozzi, especially emphasizing the teacher and the instructive process or method. It is true, of course, that this great educationist had received his first inspiration from the Swiss reformer and schoolmaster, but his own careful training and keen philosophical insight induced him to work out more clearly, vividly, definitely, and systematically the *observation* and the pedagogical devices of his master until they formed a well-rounded system.

Herbart may be regarded as practically the first example of the philosopher and psychologist in education. Two great names are generally associated with *educational method.* They are Herbart and Froebel. Froebel, though a contemporary, was not as lucid and systematic as

Herbart and lacked the keen philosophical insight and training of the latter. We shall see hereafter that Froebelian movement laid chief emphasis upon the importance of the child and his natural interests, instincts and aptitudes, and also stressed his *creative self-activity,* that is, the activity wherein the child reveals his individuality and personality. Froebel held that if the teacher fails to develop the personality of the educand, he is not supposed to teach. Herbart, on the other hand, attempted to set forth in a logical order the stages of systematic learning and formulated what are called *Formal Steps in Teaching* as a general guide to the class teacher. These are also known as the famous *Herbartian Steps.*

Herbart was a great moralist and like Plato, upheld a *moral aim* of education. He advocated that the ultimate purpose of education consists in the formation of character and cultivation of 'virtue'. According to him, children should be so educated as to possess sterling moral character. He said, "Education consists in the conquest of the lower impulses by the higher altogether. It may be summed up in *one* concept of morality." Elsewhere he observed, "The term 'virtue' expresses the whole purpose of education. ***** The one problem, the whole problem of education may be summed up in a single concept —*morality.*"

Now, the question is: 'How can one attain virtue?' In Herbart's opinion, we should shun our false notions, cast aside our prejudices, predilections, dogmas, etc. and get rid of our ignorance in order to attain 'virtue'. This is essential to widen our mental horizon and broaden the field of our knowledge and enlarge the scope of our education. This belief on the part of Herbart reminds us of the importance of encyclopaedic knowledge (*pansophism*) advocated by John Amos Comenius long ago. Herbart asserted that if the pupils can acquire a wealth of ideas and if they can form a compact, well-knit, '*circle of thought*' unified and systematized, then 'many-sided interest' will be the natural result. He maintained that the subject-matter or material for instruction must be so arranged, selected and imparted to children as to lead to this 'many-sided interest' which is the sure and only means for the attainment of 'virtue'. To quote his very words, "Those only wield the full power of education, who know how to cultivate in the youthful soul a large *circle of thought,* closely connected in all its parts, possessing the power of overcoming what is unfavourable in the environment and of absorbing into itself all that is *favourable.*"

Herbart prescribed certain psychological procedures and modes for realizing his aims and objectives of education. In order to understand the educational doctrines of Herbart it is necessary, therefore, to know something of his psychology and metaphysics lying at their back. Excepting Kant's educational theories, Herbart's was probably the first real system of education that was based upon a psychology. Though his psychological positions have now been discarded and greatly modified, the idea of establishing education upon psychology has been productive of a marked advance in educational theory.

The most fundamental tenet of Herbart's psychology is viewing the mind as a *unity,* as against the old Aristotelian 'Faculty' psychology which held that mind is divided into several distinct and water-tight compartments (*e.g.*, there is one faculty for perception, another for memory, a third for judgement, and so on). But Herbart asserted that mental life is a unity or continuity. Of course, this view does not deny that there may be varieties of experiences in the mind. There may certainly be an infinite number of passing phases of feelings, emotions, etc. experienced in one's mental life. Hence it would be psychological and more proper to say that mind is a unity in plurality or a uniformity in diversity. It is a harmonious whole.

Another point in Herbartian psychology is that it almost accepts the *Tabula rasa* theory of Locke, maintaining that the human mind is endowed with nothing innate, inborn, or intuitive at birth; it is like a 'dark chamber', a 'blank tablet', a 'clean slate' or an 'empty sheet of paper' on which perception inscribes its characters. Locke also pointed out that 'external perception and internal perception (reflection) are the two windows through which the light of the external world penetrates into the dark chamber of the mind'.[1] Herbart, however, admitted that human mind is equipped with 'one power of entering into relation with its environment through the nervous system.' With Herbart, the simplest elements of consciousness are 'ideas' which result from the interaction of the mind with the external stimuli by means of sensations or 'primary presentations of sense-perception' as they are called. When once produced the ***ideas*** become ***existences*** by virtue of their inherent *dynamic* force, and constantly they strive to preserve themselves. This psychology is almost a reflection of the pluralistic metaphysics involved in Plato's 'Doctrine of Ideas', or Kant's 'Dinge an sich', or it is akin to the 'Monadology' of Leibnitz. Herbart developed hereby a complete mechanics of ideas. According to him, the interaction of the original 'primary presentations' leads to the processes of *conception* and *generalization,* and by further interaction they lead to acts of judgement and reasoning. And what we teachers are to work with is the mass of presentations entering into the mind from two principal sources, *viz.*, experience and intercourse.

---

[1] *Vide*—**Page 27**

This Herbartian theory of constant strife and intercourse among ideas naturally leads to his well-known psychology of *apperception* and *apperceptive masses.* The term 'apperception' has been variously defined by different thinkers. Probably the briefest and clearest explanation of the term is the *association of ideas.* The process of apperception implies the linking up of new experiences with the old. Or, it may be described as the process of receiving *new* ideas with the help of *old* ideas that are already in the mind. *Apperception* occupies an important role in education. It shows the place and function of old knowledge in acquiring the new. The mind, as we know, is made up of ideas, and new ideas are regarded as forming part of the mind only by being taken up into the old mass of ideas. The chief characteristic of mind is its power of association; and the process of the assimilation or interpretation of new ideas by means of those that are already in consciousness, is what is called by Herbart *'apperception.'*

This principle which Herbart designated as 'Apperception' is the central doctrine in his entire educational system, and he frequently returns to the same from many different angles. In accordance with this principle, the teacher can secure interest and attention on the part of his pupils to any *new idea* or set of ideas and can have them retain it only by making use of the store of previously acquired and related knowledge. Every lesson in order that it may be successful must be connected with what the student has already known or experienced. It was felt by Herbart that the pupils must first be made conscious of their existing stock of ideas so far as they are similar to the material to be presented *anew,* and that this can only be done by a review of the preceding lessons or by giving a brief outline of what is to be newly undertaken, or by both the procedures. The recognition of this fact leads, as we shall see later on, to the provision in any lesson, of the Preparatory or Introductory Step in Herbart's Formal Method. The 'Apperceptive system' or 'Apperceptive mass' stands for the mind's *existing store* of ideas already lying in consciousness. This is the *old* stock of previously acquired ideas. All instruction is to be related to and harmonized with this old mass. Every *new* lesson in order to be effective and interesting must be connected with what the children already know. The instructor must make it a point to arouse the apperceptive mass of the pupils at the time of imparting *new* ideas.

Now, the educational problem thus becomes 'how to present new material in such a way that it can be *apperceived or incorporated* with the old.' Hence, too, the soul of the pupil is largely in the hands of the instructor in as much as the latter can make or modify the former's 'apperceptive masses' or system of ideas. The key to Herbart's philosophy of education is this: "The pupils do not make their world but instead are themselves made by the world of *ideas* which the teacher presents to them. * * * * * Their minds are formed by the *ideas* that the world and their teachers impress upon them." It is perhaps because of the *control* of the pupils' destiny by the teachers that Herbart asserts the aim of education to be the building of their moral life and character, and in this respect he is at one with Kant in holding that 'there is nothing in the whole world, or indeed out of it, which can be taken without limitation as *good* except the *good-will.*'

Another characteristic feature of the Herbartian Method is the 'Correlation of Studies'. It may also be called the 'unification of studies'. This implies that all the different subjects in the curriculum are to be taught in connection with each other, rendering them mutually helpful; otherwise, a wide gap may be left in the knowledge of the pupils. Every school subject should, as far as possible, be related with every other, *e.g.*, History with Geography, Geography with Mathematics or Science, Science with Nature Study, and even Spelling with Reading and Writing, and so on. This very principle was further developed by the later Herbartians under the name of 'concentration' or the unifying of all subjects about one common central study, such as, Literature or History. This principle logically follows from Herbart's view of the *unity* of mind. A thread of relationship runs through the 'whole choir of heaven and furniture of earth.' "Character," says Herbart, "depends upon will, will upon desire, desire upon interest, and interest upon the *circle of thought*; and a strong character can be formed only by cultivating an extensive and coherent circle of thought." Our pupils are to be *'philosophers'* with their knowledge neither scattered nor unrelated but organized in a comprehensive form embracing interrelation, inter-connectedness and unity in the *circle of thought.* There can be no reception without correlation, just as there can be no impression without the corresponding expression.

Let us now take up the *Formal Steps.* Herbart realized that with a view to securing a broad range of material unified and systematized, it is necessary to formulate a plan or method of instruction. This plan of instruction, according to him, is to conform to the normal working and *development* of the juvenile mind. Hence the Herbartian Method is named by some writers as the *Developing* or *Genetic Method.* In formulating this method, Herbart distinguished between the two kinds of mental processes necessary for education, and they are *Absorption* and *Reflection,* both of which are required in alternation for the purpose of grasping new knowledge. Some characterized this alternation between the two kinds of processes as the *'breathing of the mind.'* Absorption is the acquisition of new facts or ideas, while Reflection is their systematization or unification in the mental make-up. The human mind proceeds in psychical development from the *first* to the *second.* On the basis of this psychical procedure Herbart worked out the main principles of method and he stated them as follows:

"Give equal prominence to absorption and reflection. That is to say, emphasize equally (i) *clearness* of the individual perception, (ii) *association* of the manifold, (iii) co-ordination of the associated, *i.e., system,* (iv) progress through exercise according to this co-ordination, *i.e., method.*" Thus we find that the original formal steps of instruction, according to Herbart, were only *four, viz.,* (i) *clearness,* (ii) *association,* (iii) *system,* and (iv) *method.*

Later on, Herbart's disciple Ziller divided the step of *clearness* into two steps, *viz., Preparation* and *Presentation*; and Reid, the more recent Herbartian, added *Aim* as a sub-step to Preparation. The names of the other three steps have been altered for the sake of greater lucidity and significance by the later Herbartians, and so the Five Formal Steps of instruction now stand as follows:

I.	**Preparation**	For	**Clearness**	of	*Herbart*
II.	**Presentation**				
III.	***Comparison & Abstraction**	„	**Association**	„	„
IV.	***Generalization**	„	**System**	„	„
V.	***Application**	„	**Method**	„	„

I. *Preparation* or *Introduction* (आयोजन, अवतारणा): This is the stage of the lesson when the teacher explores

---

*** Other Herbartians described the last three steps as Assimilation, Application and Recapitulation respectively.**

the minds of the pupils so as to *prepare* them for receiving *new* knowledge. And this can be done by putting to children some preliminary questions, thereby arousing their *apperceptive masses.* This stage has, therefore, a *two-fold* function:

(*i*) To present clearly to the pupils the purpose or objective of the lesson ;

(*ii*) To stir up the *Apperceptive mass* in the minds of the pupils.

If the pupils lack the experience necessary for the assimilation of the *new* presentations, it will be necessary to establish a proper apperceptive base before the new lesson can be presented. We should remember that the Preparation should, as far as possible, be short and to the point or relevant.

II. *Presentation* (उपस्थापन) : This is the step which consists in the systematic and orderly arrangement and development of *new* knowledge. Here, some new materials are brought into contact with the *apperceptive mass* of the pupil. When, as a result of the First Step, right and relevant ideas are uppermost in the pupils' minds, the teacher may then *present* new ideas and facts. Naturally, children will now be able to react and respond to the materials *presented.* The materials are to be arranged into different sections and presented in their proper sequence.

The teacher is to remember that in this stage, too, there is ample room for *Questioning.* He should not be merely satisfied with *continuous* narration or *'telling'* of facts but must co-operate with the class, and *vice versa.*

III. *Association* or *Comparison* (बिषय सम्मिलन): This is the stage in which new facts and ideas are brought into relation with the old and are assimilated to them. It may, therefore, be called a welding process, which is the most important phase of learning. This is rather a *mental step* and may ordinarily be omitted for practical purposes in the preparation of Lesson Notes. At this point the materials already presented are *automatically* analysed and organized into significant relationships that can be used to discover implications.

IV. *Generalization* (सूत्र निर्द्धारण): comes in when the pupils are led through comparison or association to the perception of a general truth. It consists in the complete separation of the general notion from its concrete embodiment in particulars. The general concept arrived at is now to be connected in a systematic manner with the old and previously acquired knowledge so as to make up the organic whole. This, as we know, is the work of Reflection. Hence every lesson may not have a Generalization Step in a clear-cut form.

V. *Application* (प्रयोग, अभियोजन): This is the last stage of the lesson when the children are in a position to *apply* their new knowledge to fresh and varied cases. This step is most important because it tests if the main points of the lesson have been fully grasped by the pupils; and it is only when we ask our children to apply their knowledge to fresh cases that we can test the effectiveness of our own presentation. Knowledge is not power until it is put to use. There can be no impression without the corresponding expression, as we have already stated. In this step, the conclusions reached are applied to various new situations to make clear their significance.

After we have discussed in detail the *Formal Steps* in Teaching we should say a word or two about Herbart's views on *discipline*. According to Herbart, the *three* essentials of any system of education are: (*a*) training, (*b*) instruction, and (*c*) discipline. Training, in his opinion, implies 'formation of character', instruction is the means whereby character is formed, and discipline aims at producing good breeding and manners in pupils so that they may be ready for being instructed. Herbart puts it, "I have no conception of education without instruction, just as conversely, I do not acknowledge any instruction which does not *educate*. * * * * * Instruction will form the *circle of thought*, and education the *character*. The last is nothing without the first—herein is contained the sum-total of my Pedagogy."

By way of evaluation or critical appraisal of the Formal Steps of Herbart we might point out that the steps are indeed very helpful in the field of instruction and education. They are quite psychologically and scientifically devised and worked out. Some critics, however, have shown their limitations and weaknesses. They hold that only those subjects 'that have bearing upon intellect alone' can be effectively taught with the help of these Formal Steps. But in the case of subjects that require emotional treatment, *i.e.*, 'aesthetic' subjects, as also in 'craft' subjects, the Formal Steps are of little help.

It is for this reason a critic has humorously observed that "because of these steps the lessons get frozen at a place, and the freedom of the teacher and the taught gets so limited that the child becomes inactive."

But despite all these remarks of the critics it must be admitted that the strengths of Herbart's educational theories and doctrines far outweigh their weaknesses. He may undoubtedly be regarded as one of the greatest philosopher-educators of the world. Herbart holds a unique position among the great educators of the world, because he combined in himself the qualities and attainments of both a *philosopher* and an *educator*. He was a 'subtle dialectician' with a keen, penetrating mind and great introspective and speculative powers and capacities. It was Herbart who preached in emphatic terms that the real goal or end of education consists in 'virtue', 'morality' and 'character training'. In the words of Rusk, "Education, previous to the time of Herbart, had made the training of character the end of education, while others had recognized the importance of instruction, but it was left to Herbart to connect 'instruction' with 'character training' at the same time, through *interest*."

CHAPTER 6

Froebel, the Creator of the Kindergarten (1782-1852)

FRIEDRICH Wilhelm August Froebel was born in 1782 at Oberweissbach, a small village of the Thuringian Forest in south Germany. His father was a clergyman deeply preoccupied with heavy duties in his parish and did not spend much time to attend to the family. Friedrich lost his mother when he was only a baby of nine months. His father married again and ceased to be affectionate to his son. Being thus deprived of parental care and affection Friedrich had a neglected childhood. He would often keep out of home for hours together and lived a lonely unhappy life. Naturally he became moody, subjective, introspective and contemplative even in his early years. Since his own childhood was unhappy and uncared for, Froebel, in his later life, became highly *sympathetic* and *loving* to children and made it a mission of his life to promote their happiness.

At the age of ten he was adopted by his maternal uncle who also held an important position in a Church near his village in Switzerland. He took pity on Friedrich and brought him to his own house. Here the child enjoyed more freedom and at the same time received greater attention. "For the first time the boy experienced *trust* instead of suspicion, *kindness* instead of severity, and *freedom* instead of restriction." Froebel had reminiscence of these four or five years with his uncle as one of the happiest periods of his life and he wrote about it in his *Autobiography*. Here he was sent to a village school but made practically no progress in his studies. In the school he passed for a 'dunce'. "Teaching was abstract and over his head but he did well in *arithmetic*."

At fifteen Froebel was apprenticed to a forester for receiving instruction in Mathematics and in the assessment and valuation of land and timber. But the boy did not profit much here except picking up some rudimentary knowledge of Geometry. He spent most of his time in the observation of plants, trees, birds, insects, etc. and in the study of natural phenomena where he found a *'law of unity'*. While wandering through the forests all alone for two years he acquired an ardent love of Nature and a pragmatic interest in natural laws. This sort of life induced him to uphold a *pantheistic creed* which coloured and characterized his later philosophy of education. William Boyd observes, "From his experience of life in the forest at the age of sixteen or seventeen, came not only an acquaintance with Botany, but a *mystical love of Nature,* which made him eagerly responsive a year or two later to certain phases of Schelling's philosophy."

At seventeen Froebel proceeded to the University of

Jena which was then under the direct supervision of Goethe and where world famous Philosophers like Schiller, Fichte and others were professors. The young man was specially attracted by Schelling (as mentioned before) whose idealistic philosophy profoundly influenced him, and also by Batsch, the renowned zoologist, whose ideas of *evolution* appealed to him. This experience at Jena contributed a great deal to the formation of the 'main trends of his interests and capacities', so far as his contribution to education was concerned.

After leaving the University, Froebel tried one occupation after another until he came to understand that his proper vocation in life was 'teaching'. Meanwhile, he was fortunate enough to secure an appointment as teacher in the *Pestalozzian Institute* (a Model school) at Frankfort-on-Main where he proved very successful in his job. He was so happy and overjoyed with this post that he said, "It seemed as if I had found something I had never known, but always longed for—as if my life had at last discovered its *native* element. I felt as happy as a fish in the water or a bird in the air." After teaching here for about two years he felt that more professional preparation was needed for the work of teaching and so he returned to study. He served as a tutor to three boys attending Pestalozzi's school at Yverdun. He actually worked under Pestalozzi himself for about two years from 1807 till 1809, 'drinking in *Pestalozzianism* at the fountain head.' This intimate contact with Pestalozzi and the study of his principles and methods of education prepared Froebel for formulating his own educational theories and practices.

Being a *scientist* by natural temperament and inclination Froebel again devoted some years to studying various sciences like Physics, Chemistry, Mathematics, Geology, Mineralogy and even Philology, that 'had recently made rapid strides'. Because of his specialization in Mineralogy he was offered Professorship in this subject but on account of the reopening of war with France, he joined the military service and served here till the end of the war.

In 1816 he established his first school at Griesheim, which was later transferred to Keilhau, a Thuringian village. For nine years he applied in this school a method of education in line with Pestalozzi's, based on the principle of *learning by doing* and through *self-activity*. As a result of his experience Froebel published in 1826 his masterpiece, *The Education of Man* (*Menschenerziehung*). "In all things there lives and reigns an eternal law," begins *the Education of Man*. "All things live and have their being in and through God, the divine unity. All things exist only through the divine effluence in them." About the method of education he wrote in this treatise, "The true method of education consists in considering the mind of the child as a *living whole* in which all the parts work together, to produce a harmonious unity". Some of his other works are: *'Pedagogics of the Kindergarten'*, *'Education by Development'*, and *'Mother Play and Nursery Songs'*.

Froebel started other schools in Germany, and it was in 1837 that he founded his first *Kindergarten*, literally, 'A Garden of Children' at Blankenburg, a village near

Keilhau. From this time onward he went on founding Kindergartens, establishing institutions for the training of Kindergarten teachers and also devising educative material and apparatuses for Kindergartens. Kindergartens were not so popular in Germany, but in the United States of America they were much in favour and widely appreciated.

In the year 1937 we witnessed the centenary celebrations of Froebel's *Kindergarten.* This is a system of education meeting the educational needs of children between the ages of *four* and *six* years, through the agency of *play* and the principle of *self-activity.* Its object is to give children employment in harmony with their nature, to strengthen their bodies, to exercise their senses and lead them up to the *original ground of all life*—to the idea of *unity* with themselves.

As we have said already, Froebel was deeply influenced by the idealistic philosophy of Fichte and Schelling and hence he applied his idealism to *education.* He also gained a knowledge of the principle of evolution, and from this he arrived at the conclusion that education is nothing but the realization of the *evolutionary process* in its highest phase as revealed in the individual human being—it is but 'the guidance of children's *development* from stage to stage', and the chief agency in this process of development is their free spontaneous *play activity.* Rousseau, too, as we have seen, regarded education as a process of free and spontaneous development of the innate or inherent powers and capacities of children. Froebel, however, differed from the former in this respect that he conceived of this development not exactly as a natural process but a *spiritual* one. He proclaimed that the *one* underlying power in the universe, *i.e.,* the Absolute is a *self-conscious, self-active spirit* in which can be found the explanation of the origin and purpose of the whole universe —of the kingdom of both man and nature. The spiritual reality pervades the entire universe, and the purpose of education is 'to expand the life of the individual' until it should comprehend this existence through *participation* in this all-pervading *spirit* which manifests and realizes itself in and through the universe. To quote Froebel's own words: "The end of education is to raise man into free, conscious obedience to the *Divine Principle* that lies in him, and to a free representation of this principle in his life. * * * * * It should demonstrate that the same Law rules both nature and man, and that man and nature proceed from God and are conditioned by Him."

Thus, according to Froebel, there is *one* law of unity or interconnectedness in the whole realm of nature, man and God, and this all-controlling law is necessarily based on an all-pervading, energetic, living, self-conscious and hence eternal unity. There exists a unity behind the vast differences that we perceive in the universe. This unity is God. "The school", said Froebel, "should not communicate a variety and multitude of facts, but should teach that there is an everlasting unity in all things." Education is a development which makes the individual feel and realize that he is one unit of the all-encompassing unity. The realization of this unity constitutes the aim or goal of education. Froebel's conception of the law of unity in the universe is akin to our *Upanishadic* or *Vedantic* doctrine: *'Ekamevadwitiyam'*; *'Sarvam khalvidam Brahma'* (There is one God and no second; all are the manifestations of the One Absolute.) And his educational doctrines remind us of the pantheism of Spinoza or the panentheism or ideal realism of Hegel—the latter doctrines pertaining to Metaphysics proper and not to Education. In this connection, we are also reminded of the spiritual aim of education upheld by John Comenius who said that the ultimate end of man is eternal happiness with God, and education assists us in attaining that great end or purpose.

We can generalize, therefore, the following philosophical principles underlying Froebel's educational theory and his method of Kindergarten: (*i*) *The law of unity or interconnectedness,* implying that all things and beings in the universe have emanated from *one* and the *same* source. (*ii*) *The principle of evolution,* meaning that life is a continuous process of evolution and that this growth or development is due to the force of an 'inner law' working from within. (*iii*) *The principle of self-activity* which is ingrained in the very nature of man, and consequently children must be allowed to be spontaneously *self-active.* (*iv*) *The principle of individual development through socialization,* implying that individuality can grow only in a *social* atmosphere—it feeds on common interests and common activities of mankind. An individual's life is inextricably bound up with the life of society. Hence, the child who belongs both to the family and the society must spend some amount of time in 'the society of other children in common employment'.

We have already observed that in Froebelian philosophy Nature and man are identical in respect of spiritual manifestation—one being characterized by 'force' and the other by 'consciousness'. Hence, a study and observation of the facts and phenomena of Nature are highly significant to us in as much as they can throw light on the development of humanity. Nature Study is, therefore, the central and the most important subject in Froebel's Kindergarten system. "Nature," says Froebel, "reveals God to the child." Froebel, like Rousseau, was in revolt against bookishness and laid stress not only on country walks but upon such practical activities as gardening and the care of pets and animals. Games and music (mainly vocal) were to bear, more or less, upon Nature Study. The following beautiful lines of Wordsworth, from one of his characteristic poems of Nature philosophy, reflect very accurately the spirit of Froebel's view of Nature:

> "One impulse from a vernal wood
> May teach you more of man,
> Of moral evil and of good
> Than all the sages can."

The educational value of Nature Study is the simple knowledge of the facts and workings of Nature, which in turn, gives social delight, moral improvement, religious upliftment and spiritual insight.

From a close study of children Froebel also came to the conclusion that the most important characteristic of child-mind is *creative energy,* and in our educational programme this constructive energy is to be brought into full play. 'This energy as intelligence in the individual builds up for itself its own world.' The self does not possess activity as its attribute but it is *itself* an activity, and it is by his *self-activity* that a child can realize his own nature. Creative *self-activity* is, according to Froebel, 'an activity that originates spontaneously in the mind of the person who acts'. Froebel emphasized this 'self-activity' as the method or the process of education, and hence we find that he attached great importance to *play* which is the most characteristic spontaneous activity of the child. In fact, he defined 'play' as the self-active representation of the inner life from the inner necessity and impulse. In the childhood stage this impulse to play is very strong and vigorous and should be indulged in freely. Froebel realized the true evolutionary meaning of *play* and the part it can play in education, and hence he made *play-element* the most prominent feature of the Kindergarten. He maintained that even apart from the healthy exercises afforded, play may be associated with songs, pictures and gestures and may thus help both the processes of *impression* and *expression*. 'External objects become familiar ; social qualities are fostered ; inventiveness and adaptiveness encouraged.' In a word, it is by means of play that the introduction of the child to the world of social relations and the representation of the world to himself may be made possible.

Horne maintains that Froebel and the Kindergarteners are the true educational interpreters of *play*. Play, according to them, is one of the child's highest modes of self-expression. Froebel says, "We should not consider play as a frivolous thing. On the contrary, it is a thing of profound significance. By means of Play, the child expands in joy as the flower expands when it proceeds from the bud, for joy is the soul of all the actions of that age."

Now, we might pass on to the consideration of the Froebelian 'Gifts and Occupations' which are the most original and striking of the Kindergarten materials. Just as Madame Montessori devised her 'Didactic apparatuses' Froebel also discovered a progressive series of play materials from which children might acquire certain definite ideas. Gifts and Occupations are some selected educative materials with which the children are to play and work. These have great social as well as scientific and mathematical values. They are to be handled not only as a means of gaining conquest over materials through a knowledge of their qualities and relations but as a means of stimulating social comparison and social co-operation in work and play. Just as Industry and Art are the means of satisfying human needs so also the Gifts and Occupations which virtually correspond to them, are to be kept in close relation to the social needs of which children may become conscious.

Let us take the *Gifts* first. There are six soft woollen balls, one of each of the six colours. The children find these as excellent play things and at the same time learn how to distinguish, compare and contrast. Secondly, we get wooden sphere, cube and cylinder by means of which new distinctions of shape, size, hardness, smoothness, *etc.*, are learnt. Then we have a two-inch cube divided into eight smaller cubes. With these the child acquires the knowledge of the distinctions of size, of whole and part, of half, quarter, eighth, *etc.* The child may also exercise his powers of construction, manipulation and design with these cubes. Fourthly, a two-inch cube is divided into eight *parallelopipeds* (oblong blocks). Another cube is divided into twenty-seven small cubes some of which are still subdivided. All these things are contained in boxes exactly appropriate to their respective shapes and sizes. The pupils can perform various kinds of exercises and constructions with these last three gifts. They can, for instance, measure areas, determine the principles of balance or equilibrium and can understand the principle of the transference of motion. Besides these, there are also thin wooden tablets of various shapes and colours, sticks of different lengths and rings of different dimensions. It is clear that the use of all these objects serves as a nice introduction to mathematical, artistic and other realms. Their applications, in fact, are almost countless.

Now, in presenting and demonstrating the Gifts to the children the teacher plays an important role. She is not to remain passive but *active* all the while, singing appropriate songs that make the lessons joyful, attractive and effective. When, for example, she is to present a cube, she sings a *cube song* like this:

"Eight corners, and twelve edges see,
And faces six, belong to me;
One face behind, and one before,
One top, one bottom, that makes four,
One at the right, at left side one,
And that counts six, if rightly done."

Similarly, when the teacher goes to demonstrate a sphere, she sings relevant *sphere songs* like these:

(*a*) "The ball is such a pretty thing,
About it I do love to sing,
So round it is, and light and soft,
I hold in my hands full oft."
(*b*) " 'Tis made of wool, and do you know
That on a sheep the wool did grow ?
Until some men the fleece did take,
Warm clothes and pretty ball to make."

These Gifts like Montessori apparatuses are so devised that the children can easily discover their own errors without the assistance of the teacher. But when they gradually develop into the *ideational* stage, 'freer and more imaginative' materials are necessary, *e.g.,* stair, swing, rope, ladder, etc. The didactic materials of Montessori and the Froebelian gifts provide the basis of *sense-training* for children at the early stages of their career ; but the difference between these two sets is that Montessori materials are larger, simpler and more limited, while those of Froebel freer, more imaginative and more artistic. By way of criticism of the Froebelian gifts, we may point out that Froebel's theories and principles are generally sound but to maintain that the *order* of his gifts must be invariably and unchangeably adhered to at the risk of our violating 'natural laws' and methods appears, to some extent, to be too rigid, dogmatic and preposterous.

Next, we should say something about the *Occupations.* In order to distinguish the above-mentioned objects from other play materials and activities, Froebel called the former 'Gifts' and the flexible materials 'Occupations'. The Froebelians lay stress upon such occupations as 'clay modelling', 'cardboard modelling', 'paper folding', 'wood carving', 'weaving', 'painting', 'brush-work in colour', 'plaiting' and 'wax or cork work with sticks.' The difference between the gifts and occupations, though commonly made, is an arbitrary one. Froebel himself described all the activities as occupations and the materials for them, as gifts. As Mr. Bowen points out, "The 'occupations' are mainly to do with *taking in* or *assimilating*." The former give invention, power and skill, while the latter give discovery, insight and ideas. The gifts must, therefore, come prior to the occupations in accordance with the principle that 'the human mind must, generally speaking, be fed before it can be very successfully exercised'.

It would, I think, be pertinent for us to say something in detail about the Occupations of the Kindergarten. First, the value of clay modelling was strongly urged by the Froebelians. After the pupils had studied in the open air the geography of the district, they would prepare their models in clay. Drawing also occupies a very important place in both Pestalozzi's and Froebel's systems, because it serves as a useful means of expression and a test of the child's knowledge of objects as also his incentive to observation. We can easily realize our difficulty to recollect the exact appearance of many common-place objects and articles just when we set about drawing them from memory. Both Pestalozzi and Froebel were in favour of the practical introduction of singing into the curriculum of the elementary school. Singing, according to Froebel, is to be accompanied by marching and various other movements of the body, because his idea behind these exercises is to provide for simultaneous exercises in observation, speech and the use of limbs. Regarding manual work, we may say that Froebel was the first man to recognize its educative and expressional value, while Rousseau and Pestalozzi favoured this subject only for its industrial value. Herbart and Froebel, on the other hand, asserted that "the hand has a greater place of honour besides language in elevating mankind above the brute"; and this is strikingly revealed in 'gardening.' Gardening, therefore, is one of the most important activities in Froebel's Kindergarten.

It must be remembered in this connection that Divine Providence has not given *hands* to lower animals. They are bereft of hands and walk on *all fours.* It is not merely *logos* (reason or speech) that distinguishes man from the lower creatures, but it is also the pair of hands which are the special prerogatives of mankind. Is it not, therefore, the intention of the Almighty Being that man should exercise his hands? Handwork has certainly an educative value. Gandhiji, therefore, greatly stressed handwork in his scheme of Basic Education.

Froebel's contribution to the theory of language-teaching is not very great. He said that the child has an innate impulse to use language. It is our duty only to help him to associate words with real sight or touch of the objects signified. One profound remark of Froebel is that '*word* and *thing* are at first undifferentiated by the child—they are regarded as indissoluble.' Then take the 3 R's. Froebel holds that the arts—Reading and Writing—though of immense importance, cannot introduce the pupil directly to the realities of the world. Just like Rousseau, Froebel deferred the teaching of 'reading' until the child had learnt to *talk* freely. He remarked, "The child must learn to talk before he can reasonably be taught to read." Writing should be regarded as but a special application of drawing and it should precede reading, though subsequently the two subjects may go hand in hand. Correlation of subjects is much advocated by Froebel. To quote his words, "Let composition themes be set on the history or geography already studied and not on isolated subjects; use history, geography, science, and the like for exercises in arithmetic. Questions can easily be framed on the depth of the Lake Baikal relative to the sea-level, on the average length of the reign of English kings, and the like. In studying history, let the pupils read aloud and thus acquire knowledge and skill simultaneously." Great stress was laid upon mathematical subjects by both Pestalozzi and Froebel. The latter declared that 'human intellect is as inseparable from mathematics as the human heart from religion.'

Now, we should say a word or two about Froebel's idea of *discipline*. As a corollary from his philosophical and educational conceptions, it is evident that Froebel was against the discipline of repression. He had the conviction that if children are allowed *freedom for their self-activity,* good education will be the result. Self-activity can develop only in an atmosphere of liberty. Thus we find that Froebel was an advocate of *self-discipline* or *self government* which is a growth from within and not something thrust from without.

The position of the *teacher* also is that of a friend, a companion, an elder brother or sister, a guide to the pupil. The teacher is a partner, as it were, in the same field of business. She is called the '*benevolent Superintendent*' ready to lend a helping hand at times of need. She must renounce her old authoritarian position and should act as the President of a *Republic of children*—as one *of* the pupils, one *by* the pupils, and one *for* the pupils.

By way of assessing Froebel's contribution to education we must say that he was one of the pioneers who attached great importance to the very earliest years of a child's life. The study of the child was greatly emphasized by him as by Rousseau, Pestalozzi and Herbart. The analogy of child education to '*child-gardening*' is happy and significant. Froebel pointed out that just as the plants grow automatically in accordance with the intrinsic or innate power hidden in the seed itself, so also the child grows and develops *spontaneously* and *naturally* by virtue of the inherent impulses, instincts and inclinations. Froebel was an apostle of *Playway in education.* Besides, like Rousseau he laid great stress on 'sense-training' in the early education of children. Sensory training is undoubtedly one of the most important devices in child education.

While criticizing the Kindergarten system, Graham Wallas and others have pointed out that the Froebelians have carried too far their contempt for 'books', and in their enthusiasm for 'gifts', 'occupations', 'nature study', etc., they have postponed too long the teaching of Reading and

Writing. Mr. Bowen has criticized several of Froebel's songs, some on the ground that they deal too largely with the senses of taste and smell, which play but little part in education, others on the ground that they tend to encourage a childish dread of darkness, others again on the far-fetched nature of the allegory connected with these songs.

In spite of these defects and drawbacks in Froebel's educational philosophy it must be admitted that all the best trends and traits that characterize modern educational thought culminate in his theories and doctrines. In the words of Ulich, "The kind of education which the nineteenth century calls the 'new education' is based on the work of *three* men: Pestalozzi, the prophet, Herbart, the thinker, and Froebel, who was closer to Pestalozzi than to Herbart in his intuitive religious attitude, and closer to Herbart than to Pestalozzi in his urge toward inquiry." The great aim and purpose of Froebel's life and of education may be summed up in his famous saying:

"Come, let us live for our children."

CHAPTER 7

Spencer, the Precursor of the Scientific Movement in Education (1820-1903)

HERBERT Spencer was born in 1820 in the city of Derby, England. He came of a family of teachers, his father, uncle, and grandfather, all being schoolmasters by profession. His father was a man of independent way of thinking, who believed in 'self-education'. Hence he did not like his son to have formal schooling and gave him good home education so that the boy could learn well Physics, Chemistry, Biology, Geometry, etc. quite early in life from his father and uncle. At the age of seventeen Spencer was able to acquire the knowledge of an average school student of that age, picking up the knowledge of various scientific subjects as well as Natural History, Economics, Architecture, etc. Although he did never go to university for higher education, he was brought up, as we see, in a cultured family with good literary and intellectual traditions.

Spencer worked as a teacher for some years and came to find, after a brief experience of teaching, that he was not successful in this profession. So he left this post and accepted an employment in the department of Railways where he became interested in Engineering. He followed for ten years the profession of a Railway Engineer. But even this job did not quite suit his taste and temperament and did not give him permanent satisfaction. So he quitted this job also and 'turned his abilities in the direction of a literary career'. He was now appointed sub-editor of *The Economist,* the well-known English journal. After some years Spencer left the sub-editorship of *The Economist* and made up his mind 'to devote himself to independent literary work', for earning his livelihood. He now began regularly publishing papers and articles on various subjects including Psychology and Education. His '*Social Statics*' earned him considerable fame. In 1855 he brought out the treatise '*The Principles of Psychology*'. In 1861 Spencer published his monumental work, '*Educacation: Intellectual, Moral, and Physical*'. This book is a collection of essays he wrote at different times as magazine articles. Here the author "advocates a complete change from the type of training that had dominated education since the Renaissance and calls for a release from the traditional bondage to the *classics*". This dynamic treatise embodying a severe criticism of 'educational formalism' provoked at first a wide-spread discussion but eventually it became Spencer's most popular work. He wrote various other treatises of which mention may be made of: '*The Principles of Biology*', '*The Principles of Sociology*', '*The Principles of Ethics*', '*Various Fragments*', '*Facts and Comments*', and '*Autobiography*' (published in the year after his death). But Spencer's main contribution in the field of education consists of four magazine articles later published in his *'Education'*.

The first essay in this book is: "What Knowledge is of Most Worth?" Now, the question might be asked—"Of most worth to whom,—to the individual or society?" Boyd answers to the point, saying, "The question as to *'What knowledge is of most worth'*, which is raised in the first of the Essays, is only understood when expanded into the form: 'What Knowledge is of most worth for the individual'? Since Spencer had acquired an 'aggressive nonconformist mind', it was his conviction that there should be no State interference with the life of the individual or with education which, in his opinion, is 'essentially a matter of *individual* concern'. He held that any effort on the part of the State to control and direct education would be harmful. He was also of opinion that *individual* interests and *social* interests are antagonistic to each other, and that there can be no harmony between them. He naturally prefers and attaches greater importance to individual interests. Hence he places the sciences that minister to individual health and individual well-being 'at the top of the scale of worthy knowledge', and he correspondingly puts literature and the arts relating to social factors 'at the bottom of the scale'.

In this essay Spencer has elaborately discussed the purpose and function of education. He has denounced the conventional studies of Greek and Latin and laid great emphasis on the study of various sciences, not only the physical sciences but also physiology, psychology, hygiene, biology, sociology, politics, and the like. Spencer maintains that an exclusive study of the *classics* is of no use, since it cannot prepare us for life. The sciences, according to him, should be included in the curriculum. This forward step on the part of Spencer was greatly opposed by the members of the conservative school of educators. As Dr. Graves puts it, "During the greater part of the century a contest was waged between the advocates of classical monopoly and the progressives who urged that the sciences should be introduced."

Let us quote here some of the relevant lines from Spencer, which indicate in a nutshell his definition of the *end* of education, "To prepare us for *complete living* is the function which education has to discharge, and the only rational mode of judging of an educational course is to judge in what degree it discharges such function." Thus we see that according to Spencer, the aim of education consists in the 'preparation for complete living'. Now, what does he mean by 'complete living' ? Living consists of (i) direct and indirect self-preservation, (ii) earning livelihood (food, clothing, shelter, etc.), (iii) rearing of off-spring, (iv) worthy and intelligent citizenship, (iv) proper utilization of leisure, and so on. Spencer asserts that for each of these items of living, a knowledge of science is greatly helpful. Teaching of science is, therefore, of great value for *all* living. A person, with a view to living completely, must have some elementary knowledge of *all* sciences. To quote Spencer again, "Our first step must obviously be to classify in the order of their importance, the leading kinds of activity which constitute human life. They may be naturally arranged into: (1) those activities which directly minister to self-preservation; (2) those activities which, by securing the necessaries of life, indirectly minister to self-preservation; (3) those activities which have for their end the rearing and discipline of offspring; (4) those activities which are involved in the maintenance of proper social and political relations; (5) those miscellaneous activities which fill up the leisure part of life, devoted to the gratification of the tastes and feelings."

The ideal of education, in Spencer's opinion, is complete preparation in *all* these divisions. He continues, "For complete living, we must know in what way to treat the body; in what way to treat the mind; in what way to manage our affairs; in what way to bring up a family; in what way to behave as a citizen; in what way to utilize those sources of happiness which nature supplies—how to use all our faculties to the greatest advantage of ourselves and others." According to Spencer, the function of education is to impart the knowledge of those sciences which throw light on the subjects mentioned above.

Let us now take up in detail Spencer's divisions of man's functions in life:

(*i*) As regards 'direct self-preservation' Spencer observes that Nature takes it into her own hands. In other words, Nature takes care of all the things that are considered necessary for our self-preservation, provided, of course, we do not put any obstruction in the way of our spontaneous activities. "Indirect self-preservation", according to Spencer, is greatly assisted by a knowledge of hygiene and physiology. 'Here the doctor should come to the school-master's assistance and give him a manual from which to teach physiological facts and rules of health'.

(*ii*) As to 'earning livelihood', Spencer holds that the sciences like mathematics, physics, chemistry, geology, biology, astronomy, etc. are of vital importance to all kinds of practical arts and business of life. Spencer maintains that there are hardly any activities in our life, that do not require the help of some kind of sciences. He says, "A grounding in science is of great importance, both because it prepares for all this business of life, and because rational knowledge has an immense superiority over empirical knowledge."

(*iii*) Next, Spencer strongly advocates the importance of instruction and training in the proper way of rearing offspring and includes such knowledge in the curriculum. It is usually found that the parents are ignorant of this science. According to Spencer, this knowledge should be acquired by parents as also by those persons who have parental responsibility. The best way in which we can teach the young is to bring them up in such a manner that when they themselves have to rear children, the memory of their own youth may serve as a guide to them.

(*iv*) About 'training in citizenship', Spencer considers the knowledge of history as highly valuable and useful. But, according to him, history, as it is now written, is useless. Books on history are not written properly and *scientifically*. In Spencer's opinion, the history which 'deals with kings and queens, court intrigues, and plots' is of no use, in as much as it throws no light upon the development of societies and institutions. To him, *science* serves as a key also to history, and hence without scientific knowledge history cannot be properly used. To quote his words, "History does not illustrate the right principles of political action. The great mass of historical facts are facts from which no conclusions can be drawn—unorganizable facts, and, therefore, facts of no service in establishing principles of conduct, which is the chief use of facts. Read them if you like, for amusement, but do not flatter yourself they are instructive." Spencer believes that a man is best fitted for citizenship through a knowledge of the science of history in its political, economic and social aspects. The effect of the study of history is, to a certain extent, the same as that of *travel.* The reading of history, like *travelling,* broadens the mind of the pupil, by bringing home to him the truth that "there are also people beyond the mountain, that there are higher interests in the world than his own business concerns, and nobler men than himself or the best of his acquaintance." Besides history, a knowledge of politics and sociology is specially suitable for this purpose. In Spencer's view, a knowledge of the evolution of society is more useful than that of the kings, queens, rulers, or warriors.

(*v*) Lastly, comes 'the remaining division of human life, which includes the relaxations and amusements filling leisure hours'. Spencer was fully alive to the value and importance of leisure hour occupations and he also realized the necessity of *education* for the utilization of leisure hours. For this purpose, he says that music, painting, drawing, sculpture, architecture, literature, poetry, etc. are of immense value. He thinks that 'even the aesthetic or leisure side of life depends upon physics, mechanics, and psychology as a basis for art, music and poetry'.

On the whole, then, Spencer asserted that for purposes of *discipline* as well as for *guidance*, *'science'* is of the chiefest value. He remarked, "Thus to the question we set out with—'What knowledge is of most worth ?'—the uniform reply is—Science. This is the verdict on all the counts. For direct self-preservation or the maintenance of life and health, the all important knowledge is —Science. For that indirect self-preservation which we call gaining a livelihood, the knowledge of greater value is —Science. For the due discharge of parental functions, the proper guidance is to be found only in—Science. For that interpretation of national life, past and present, without which the citizen cannot rightly regulate his conduct, the indispensable key is—Science. Alike for the most perfect production and present enjoyment of art in all its forms, the needful preparation is still—Science; and for purposes of discipline—intellectual, moral, religious—the most efficient study is, once more—Science."

Now the question is—'Should we teach *all* sciences to everybody ?' "No." says Spencer, "This is not possible. Only a love of knowledge and a scientific attitude and outlook are to be fostered in children so that their minds may be 'well disciplined to acquire knowledge'."

Herbert Spencer has laid down some very important principles of education, most of which have come down to us in the form of *maxims* of education and are widely accepted in the practice of education. They are as follows:

1. Start from the concrete thing and go on to the abstract idea.
2. Proceed from observation to reasoning, and thence to memory.
3. Teach inductively (from examples to laws, individuals to classes, particulars to generals, practical to theoretical, simple to complex, and indefinite to definite).
4. Make all lessons attractive, useful, interesting, and pleasurable.
5. Encourage self-teaching.
6. Tell the pupil as little as possible and lead him to tell you as much as possible, from his own observation and deduction.
7. Teach through the senses.
8. Let the pupil *learn by doing*.
9. Start from what the pupil knows and go on to what he does not know.
10. Follow nature and train *every* faculty.

These are sometimes called ten *golden rules* of teaching, if teaching admits of any rules at all. The sum and substance of all these principles is that 'education is an *individual* process, which begins with the concrete experiences of the pupil and calls for learning by personal discovery and approves itself satisfactory by creating pleasurable experiment.'

So far as *'intellectual education'* is concerned, Herbert Spencer pointed out that there is a close relationship or kinship between the current systems of education and the corresponding social states with which they have existed. That is to say, the scope and character of education are greatly affected by the prevailing political conditions. Spencer observes, "There cannot fail to be a relationship between the successive systems of education, and the successive social states with which they have co-existed. Having a common origin in the *national mind,* the institutions of each epoch, whatever be their special functions, must have a family likeness. * * * * * Along with political despotism, stern in its commands, ruling by force of terror, visiting trifling crimes with death, and implacable in its vengeance on the disloyal, there necessarily grew up an academic discipline similarly harsh—a discipline of multiplied injunctions and blows for every breach of them—a discipline of unlimited autocracy upheld by rods and ferules, and the black-hole. On the other hand, the increase of political liberty, the abolition of laws restricting individual action, and the amelioration of the criminal code have been accompanied by a kindred progress towards non-coercive education: the pupil is hampered by fewer restraints, and other means than punishments are used to govern him."

While setting forth his views on *moral education,* Spencer takes the stand of a *naturalist* ; and in this respect there is agreement of his views with those of Rousseau, although it is believed that Spencer never read Rousseau or *the Emile.* The only educator that he studied was Pestalozzi. But in respect of preaching *individualism* in education, Spencer's views are somehow similar to those of Rousseau expressed in *the Emile.* Rousseau, as we know, made education mainly an *individual* process, and he was the advocate of 'discipline by natural consequences'. Spencer, too, was at one with the former in maintaining that punishment should come to the child as a *natural consequence* of his own acts, and make him disciplined. He puts it, "When a child falls, or runs its head against the table, it suffers a pain, the remembrance of which tends to make it more careful ; and by repetition of such experiences, it is eventually disciplined into proper guidance of its movements." Spencer adds here that Nature illustrates to us the true theory and practice of moral discipline. According to him, there should be no imposition of 'artificial punishment by an arbitrary infliction of pain' ; the wrong actions of the child will bring his own punishment. Spencer here makes no distinction between *physical* and *moral* laws, and he upholds his belief in *hedonistic ethics.* He adopts the Utilitarian view when he remarks, ". . . conduct whose total results, immediate and remote, are beneficial, is good conduct ; while conduct whose total results, immediate and remote, are injurious, is bad conduct. The *ultimate* standards by which all men judge of behaviour are the resulting happiness or misery." It follows from this that a conduct or an act which gives rise to pain or unpleasant experience, be it the burning of a finger or stealing, is bad, and its painful consequences for the individual are sufficient proof of its badness or undesirability and also an adequate reason for its avoidance later on.

Regarding *physical education* also, Spencer's views coincide with those of Rousseau. The physical education of children, according to him, is, in various ways, seriously faulty. It errs in deficient feeding; in deficient clothing; in deficient exercise (among girls at least); and in excessive mental application. According to Spencer, proper place and importance should be given to physical education and it should be conducted on *scientific* principles.

Thus we find that there are many striking points of resemblance between the educational views of the two great thinkers—Rousseau and Spencer. It is for this reason a writer has remarked, "Herbert Spencer is practically Jean Jacques Rousseau only with a scientific bias."

Let us now say a word or two about the *Culture Epoch theory* in which Spencer believed. This theory is, of course, closely associated with the name of Ziller. It is a particular application of the theory of *Recapitulation* or *Reminiscence,* which has for its basis a parallelism between *racial* and *individual* development. The theory implies that knowledge grows and develops in the child through the same stages as it has passed through, in the *race.* Spencer asserts that the child is to be made to traverse or pass through all the stages through which the human race has passed, in the process of its evolution. In other words, the child must learn as the *race* has learnt. The theory also signifies that both the selection and arrangement of 'subject-matter' and 'method of instruction' must be determined by the historical stages of human culture. Spencer says, "The education of the child must accord both in mode and arrangement with the education of man considered *historically.*"

Our discussion of Spencer's educational theories and practices will remain incomplete unless we make a brief reference to the *superfluous or surplus energy theory of play* advocated by him. This is the oldest theory of play which was first put forward by the great German poet, Schiller and was later accepted and developed by Spencer. Hence it is known as Schiller-Spencer theory. According to this theory, play is the expression of the *surplus* energy in the organism. During childhood the organism being fed, well-nourished and defended by parents or elderly persons, is not required to spend any energy either for procuring the necessaries of life or for self-defence. Hence it possesses more energy than is actually needed for its growth and self-maintenance. This pent-up energy, therefore, finds outlet in play. In the words of Nunn, "A child at play may be likened to a locomotive engine which has taken from the coal more energy than is needed to draw the train and is, therefore, compelled to let off surplus steam."

By way of criticism we may, however, point out that this superfluous energy theory of play cannot be said to be wholly correct. First, this theory fails to explain why play assumes some *definite* forms rather than being a formless discharge of energy. Secondly, it cannot also account for the simple plays of the lower animals who have to strive and labour for procuring their food and shelter and hence have no surplus energy left. Thirdly, the young ones of animals as well as human children go on playing even when they are tired and exhausted. And lastly, why is not that surplus energy manifested in the form of work but only in play ?

Thus we find that Herbert Spencer wanted to test everything in the crucible of *scientific analysis.* He wished to solve the problems of education, culture, civilization and life only through *science.* This he did, because he belonged to an age of *industrial revolution* and *intellectual renaissance* and was greatly influenced by the scientific dicoveries and inventions of his time, especially, of those concerning evolution, and 'he did his own thinking'. He came of a 'stock of *individualists* who were prepared to discuss and question all social customs and conventions and to accept nothing for granted, that violated the dictates of reason'. As a result, Spencer held beliefs and views which often went against those of 'the classical idealists, the supernaturalists, the literary humanists, the primitive-nature-ists and the class-conscious restrictionists'. In the selection of studies, *utilitarianism* and *individualism* weighed more with him than life-less conventionalism, and for this he is often and unduly criticized.

Some critics have remarked that Spencer was a more 'convinced individualist' than the Utilitarians. He is also called 'a natural rebel, independent, self-confident, and vigorously assertive' and his intellectual independence made him ignore the view-points of other thinkers except in so far as they were in agreement with his. In fact, he admitted his own failures in later years. In his *Autobiography,* Spencer confesses that he could not by any means 'settle down to study Plato', saying, "Time after time I have attempted to read, now this dialogue and now that, and have put it down in a state of impatience with the indefiniteness of the thinking and the mistaking of words for things * * * * * When I again took up the dialogues, I contemplated them as works of art, and put them aside in greater exasperation than before."

It cannot be disputed, however, that 'Spencer possessed talents of a high order', and there is no denying the fact that Spencer's treatise, *'Education: Intellectual, Moral, and Physical'* belongs to that brief list of immortal works which will for ever appeal to all successive generations of pupils, teachers, parents, guardians, educational administrators, all alike. They will all profit by studying the book. In this connection, we may quote here the following beautiful lines from Charles T. Smith who has very highly spoken of the qualities and merits of this treatise:

"Spencer was a prophet with a message. Parts of that message have been accepted and acted upon. Other parts still receive only lip-service. There is still no valuation of subjects according to their real use in life; the teaching of science still fails to foster the spirit of scientific inquiry, the spirit in which ethical, moral, and social problems should be studied; history is still taught without the scholars being enabled to see how the society of nations has grown and organized itself; religious instruction still instils belief in myths and supernaturalism, and bases the incentive to worship on credulity instead of on a commendable approbation of things that are worthy of honour; there is still little understanding of the fact that science underlies the production and appreciation of sculpture, painting, music, and literature, and that science itself is poetic; and parents have still received no schooling that would provide them with the psychological knowledge required for the proper upbringing of their children. Only when these and many other defects in our schooling system have been remedied, by the adoption of Spencer's disregarded proposals, will education become wholly rational, and Spencer's aim, 'Complete Living'—that is, a full life for every individual—be realized."

From a study of Spencer's educational doctrines we are convinced that he made application of *scientific methods* to the study of every subject of the curriculum and was able to give education *philosophic* foundations that were sound and enduring. Herbert Spencer is undoubtedly one of the greatest minds of the world—a great philosopher-educator with a radical *scientific outlook,* the only English writer on the subject of Education during the nineteenth century, whose doctrines have exerted a profound influence upon subsequent educational theories and practices.

CHAPTER 8

Dewey, the Exponent of the Social Ideal in Education (1859-1952)

JOHN Dewey, the distinguished American philosopher, psychologist and practical teacher was born at Burlington, Vermont, in New England, in October, 1859. His father was an ordinary shopkeeper and a puritan by faith. Hence Dewey was brought up in a rural community. In childhood he would often sit in his father's shop and attentively listened to the 'shrewd, lively comments and discussions' of the local people on current politics, religion, etc. So he realized quite early in life the 'strength of *group consciousness*' in the manifold activities of the village community. This experience of his boyhood days brought to Dewey's mind *two* outstanding convictions which practically coloured his philosophy of life and also influenced his educational ideas and views in future. These two convictions, in the words of Curtis and Boultwood, are as follows:

(*i*) "The traditional methods of schooling were futile and fruitless."

(*ii*) "The human contacts of everyday life provide unlimited natural, dynamic learning situations."

Dewey graduated from the University of Vermont at the age of twenty and devoted one more year to the study of Philosophy. Then he started teaching in a high school. Thus we find that he began his professional career as a schoolmaster. His first publication, '*The Metaphysical Assumptions of Materialism*' came out when he was only twentythree years old.

Now he decided on the career of teaching Philosophy and proceeded to Johns Hopkins University in 1882, from where he obtained the degree of Doctor of Philosophy in 1884. At Johns Hopkins, Dewey studied Philosophy under Charles S. Peirce and George S. Morris, Psychology under G. Stanley Hall, and Political History under Herbert B. Adams. Thus he had the fortune to receive education from all these eminent and world-famous teachers. He taught for sometime in the University of Michigan as Lecturer in Philosophy. In 1888, Dewey accepted Professorship of Philosophy at the University of Minnesota and taught there only for a year. Again he returned to Michigan University as Professor and Head of the Department of Philosophy.

Then in the year 1894, he joined the University of Chicago as Chairman of the combined Departments of Philosophy, Psychology and Pedagogy. Here he remained for long ten years upto 1904 and formulated all his doctrines and theories of Education. In 1896, he established the famous 'University Elementary School' which was called *Laboratory School, or Experimental*

School. It was also known as *Active School.* This school wielded a profound influence on the theories and practices of education in the United States and also brought him world renown and recognition. Dewey's educational theory and practice actually owe their origin to this *Experimental School* where he carried on all his tests and experiments in Pedagogy. He acted as the Director of the 'School of Education' from 1902 to 1904.

In 1904, Dewey resigned from the University of Chicago Faculty and accepted Professorship of Philosophy at Columbia University, New York City, and in this capacity he also taught at Teachers College, Columbia University. At Columbia he worked for about three decades. During these years Dewey wrote quite a number of treatises on Education, Philosophy, Psychology, Logic, Metaphysics, Ethics, Sociology, Political Science, and so on. His world-famous masterpiece, *'Democracy and Education'* was published in 1916. This monumental work revolutionized the current educational theories and practices and brought about an innovation in the domain of education. It is widely read all over the world.

From 1930 till 1939 Dewey was Professor Emeritus of Philosophy in Residence, Columbia University. Even after retirement from the University of Columbia, he had maintained contact with this University till he passed away in 1952.

While working at Columbia, he was invited by several countries like Japan, China, and Russia to deliver lectures on various aspects and problems of education. In 1919, he visited Japan and lectured on Educational

Philosophy at Tokyo Imperial University. In the same year he visited China and delivered lectures at National Universities of Peking and Nanking. Here he stayed nearly for two years from 1919 to 1921. Turkey and Russia also requested him to help them in the matter of reorganization of their educational systems. Besides all these, Dewey delivered memorial lectures at various other Universities of Harvard, Yale, Edinburgh, etc.

During his lifetime John Dewey published innumerable articles and wrote about fifty books on different subjects. Of these, the following are the books on Education: *My Pedagogic Creed, The School and Society, The Child and the Curriculum, Relation of Theory and Practice in the Education of Teachers, The School and the Child, Moral Principles of Education, Interest and Effort in Education, Schools of Tomorrow* (with Evelyn Dewey), *How We Think, Experience and Education, Education Today,* and *Democracy and Education.* Among his famous treatises on Psychology, mention may be made of the following: *Interest and Effort Related to Will, Psychology and Philosophic Method, Creative Intelligence, Human Nature and Conduct: An Introduction to Social Psychology, Knowing and the Known, Intelligence in the Modern World, etc.*

In order to study the educational theories and principles of John Dewey it is necessary for us to have an idea of the socio-economic background of the country in the latter half of the nineteenth century. Epoch-making changes were brought about by the *Industrial Revolution.* Rapid developments occurred in the fields of science, technology, agriculture, and so on. For further exploration of the necessaries as well as amenities of life, there was 'westward expansion' of the American people in response to Horace Greeley's call to his countrymen: *"Go west young man and grow up with the country."* Dewey realized the gravity of all these social and industrial changes that had been taking place in American life. He felt that the traditional schools could no longer keep pace with the 'extraordinary changes wrought in the structure of society' as a result of the *Industrial Revolution.* And so he wanted that children must have a first-hand acquaintance with the world in which they lived, and with this end in view 'he undertook to bring the children of his Experimental School into touch with the real situations in life'. To quote his words, "The school cannot be a preparation for social life except as it reproduces the typical conditions of life." Dewey, therefore, laid stress on the study of *industries,* as a means of realizing the aim of education. He thought that industrial activities are most useful for social advancement and economic development and hence he insisted on the inclusion of such activities in the school curriculum.

It may be said that Dewey's philosophy of education originated in the application of the doctrine of *evolution* in child study and also his *pragmatic thinking* which subordinated 'intellect' to 'practical ends' or goals. Pragmatism is a doctrine which holds that the world is in a state of perpetual flux or change. The nature of life, therefore, is *experimental.* Man creates his *own* values even as he experiments with life. Hence this doctrine may also be called *experimentalism.* The philosophical principles of pragmatism are *matter-of-fact.* Whatever works out usefully and satisfactorily is good. Whatever works in a practical situation is true. Pragmatism believes in practical and *utilitarian* philosophy, morality and education. Dewey was fully 'acquainted with the country steadily expanding towards the West' and was also aware of the problems of the Industrial Age, 'arising out of the *exodus from field to factory*'. Hence, it was most natural for him to take a practical, realistic and utilitarian view of things.

Before discussing Dewey's educational thought, it would be pertinent for us to say a word or two about his *psychology* including his conception of 'mind' and 'knowledge'. As a believer in evolution, Dewey upheld the '*instrumental theory* of mind, which considers 'mind' as the most useful and helpful *instrument* of a human being for enabling him to solve the varied problems in his struggle with the environment for survival. 'Ideas' are nothing but the resultants of the contact of the mind with the environment, and they are naturally not static but growing, developing, changeable and *dynamic.* Dewey, for this reason, is also called an *instrumentalist* in addition to his being a pragmatist and an utilitarian. So far as his theory of knowledge is concerned, he maintains that *action* comes first and foremost, which gives rise to *experience,* which, in turn, leads to *knowledge.* First action, then experience, and then knowledge. This is the order. The Bhagvad Gita also extols 'action' (*Karma*) and upholds its supremacy in the following lines: * "Man attains neither freedom here, nor salvation hereafter, by discarding *action* altogether. Not for a moment can you be free from action. Nature impels each one *to act.*" (*Chap.* III, *Slokas* 4 & 5). The Lord *Krishna* impressed upon *Arjuna* that attainment of knowledge is impossible without undertaking *actions,* which afford one plenty of *experience.*

Thus we find that next to 'action', John Dewey attaches great importance to *'experience'*. Education, according to him, must be conceived of as 'a continuing reconstruction of experience', whose process and goal are one and the same. Or, in other words, education is *of* experience, *by* experience, and *for* experience. The educational process, in Dewey's opinion, has no end beyond itself—it is its own end, since, in reality there is nothing to which growth is relative save more growth; there is nothing to which education is subordinate save more education. The aim of education, therefore, is *more education.* Dewey observes, "* * * * * to set up any *end* outside of education, as furnishing its goal and standard, is to deprive the educational process of much of its meaning, and it tends to make us rely upon false and external stimuli in dealing with the child." The school, according to him, is not preparation for life—it is *life* or *living.*

John Dewey's concept of 'education through experience' or *'progressive education'* (or, *'newer education'*, as it is also called) presents a contrast to *'traditional education'*. In his book, *'Experience and Education'*, he writes, "To imposition from above is opposed expression and cultivation of individuality; to external discipline is opposed free activity; to learning from texts and teachers, learning through experience; to acquisition of isolated skills and techniques by drill, is opposed acquisition of them as means of attaining ends which make direct vital appeal; to preparation for a more or less remote future is opposed making the most of the opportunities of present life; to static aims and materials is opposed acquaintance with a changing world." It is in the course of putting ideas to the test of *experience* that education is gained. Dewey wanted to offer his pupils wide opportunities for the practice and experience of self-investigation or 'purposeful enquiry' and exploration. To him, therefore, the growing, transforming, revising or reconstituting of experience is education. His 'belief in *all of life* as education has had a vast influence on curriculum and teaching methods'. The most marked presentday tendency in education consists in the process of relating the individual to society, so as to secure both personal development and social welfare, to harmonize individual rights and social duties. Both individual and social factors have been emphasized and harmonized by Professor Dewey who has defined education as 'the process of remaking experience, giving it a more socialized value through increased individual experience, by giving the individual better control over his own powers.'

It is the eclectic tendency in modern thought of education that has found more than ever before a prominent expression in the educational doctrines of Professor John Dewey.

For Professor Dewey, 'Philosophy' and 'Education' are not words conveying altogether different meanings.

According to him, each of the two words means the study by man of man himself and of the society, the world he lives in, through practical experience and not through some general notions or principles known or accepted on the authority of others. He goes so far as not only to treat philosophy and education as identical but also to declare: "If we are willing to conceive education as the process of forming fundamental dispositions, intellectual and emotional, toward nature and fellowmen, philosophy may even be defined as *the general theory of education*." Hence according to Dewey, Philosophy is nothing but *Education* in its most general terms, *i.e.*, Philosophy is a generalized theory of Education.

Dewey's philosophy views life as a whole and not in discrete or separable parts. There is a fundamental unity in the experiences gathered in the different stages of a man's life, *i.e.*, as a child, as a youth and as an adult, in as much as they constitute, and contribute to the enrichment of the entire life and not the particular stage or phase of life alone. Likewise, Dewey's constant object in education has been to establish a close contact and relationship between the class-room and the world around. The school should be a place not for learning from books and teachers only but for learning through *actual living*, through personal experience. The school is a simplified, purified and better-balanced society. Books and teachers should be there just to help in the effective establishment of close contact between the life lived by the pupils in the school and the life lived in the larger society, the larger world outside the four walls of the school. The fundamental principle underlying Dewey's educational theory is not that the traditional wisdom should be discarded altogether and the progressive education should proceed quite freely independent of any control. On the other hand, Dewey holds that 'basing education upon personal experience may mean more multiplied and more intimate contacts between the mature and the immature than ever existed in the traditional school, and consequently more, rather than less, guidance by others'. He has just raised the problem of *progressive education* as opposed to traditional education and has not claimed to have solved it finally, as the process of education being an *ever continuous* process can never be finally solved. In his *'Experience and Education'*, Dewey has presented the 'ever solving, but never solved' problem of education in the following words:

"The general principles of the new education do not themselves solve any of the problems of the actual or practical conduct and management of progressive schools."

In presenting his theory of education through experience or experiment, Dewey has sought to solve *four* fundamental problems of education:

(*i*) How to establish closer contact between the school and the home and the world at large;

(*ii*) How to introduce the subject-matter that has a positive value and real importance in the child's own life to harmonize or reconcile the Hegelian idea of conflict between interest and effort by bringing in a purposive element in education;

(*iii*) How to carry on instruction in reading, writing and arithmetic, the elementary subjects through everyday experience and occupation so that the child can feel their worth or necessity for himself by their relation with the common pursuits of his actual life at home or abroad, *i.e.*, with his environment;

(*iv*) How to provide adequate opportunities for individual powers and needs so as to ensure both personal development and social welfare.

Dewey's approach to the problem of education is significant, as it indicates his belief in the whole of life as education. He stresses the fact that education is a natural process whereby life renews or remakes itself on the social plane. "Education, in its broadest sense, is the means of the social continuity of life." The more civilization advances, the more complex life becomes, and the greater the need for education to bridge the gulf between the infant and the adult, between the immature and the mature. Education is thus an ever developing process determined at a particular situation by the needs of that situation. And it follows that education has no meaning apart from the social environment. Education is, no doubt, meant for the fullest development of the individual powers but, while Dewey admits this, he believes that such development is possible only because the individual lives in a social institution. He has thus stressed the sociological aspect in education. While Pestalozzi and Froebel, emphasizing the practical aspect of the psychological tendency in education, viewed education as the means for social betterment, Professor Dewey has regarded education as the means for 'social continuity of life.' To quote Ulich, "According to Dewey, education is—to modify an august phrase of Lincoln's—a process performed '*of* the people, *by* the people, *for* the people'. It is a social process, and it cannot be separated from the total character and tasks of society. In the school, therefore, should be concentrated all those activities which help and teach the child to share in the process and the fostering of civilization." We should individualize education but *socialize* the pupils.

Dewey's *Laboratory School* or *Experimental School* in the University of Chicago, as we have said before, made the most fundamental contribution to educational theories and practices. Dewey noticed that enormous changes had come about in every sphere of life as a consequence of the *Industrial Revolution.* The old family life broke down and changed, and the self-sufficient simple rural communities yielded place to 'complex townships'. The child of today finds himself in the midst of *finished* manufactured goods not at all knowing how these goods have been actually produced, and consequently he lacks in motives as well as opportunities for learning, while these were so much available in the ordinary life of the child who was born half a century ago. William Boyd gives a vivid picture of the situation: "He (*the modern child*) never sees cloth till he sees it in the form of clothes, nor foodstuffs till they appear on the table. The house in which he lives is illumined by gas that lights on the application of a match, or by electricity that only needs a button to be pressed. The country child a half century ago was more fortunate in his daily experiences. He saw in the immediate neighbourhood of his own home all the processes of cloth-making from the shearing of the sheep to the working of the loom; and instead of pressing a button and flooding the house with electric light, the whole process of getting illumination was followed in its toilsome length from the killing of the animal and the trying of the fat to the making of wicks and the dipping of candles." Evidently, the life and experience of *that* child were of greater educational value than in the case of the modern child. The influence of his home and social environment exerted a powerful influence on increasing the boundaries of his knowledge and on forming his character, without any conscious effort or strain. "The motives for learning, now conspicuous by their absence, were present in abundance in the daily routine." Dewey, therefore, insists that the educational institution called the '*school*' should take into account this change in the social structure and its effects on the conditions of living.

There should be a close resemblance between the classroom and the world around. The school should be a 'society in miniature', representing *real life* through simplified experiences reduced to the child's plane of comprehension. The school curriculum must look to the needs and requirements of real and practical lives. We should try to bridge the gulf between school and home, school and society, school and the world. The school should be a place where the child can learn cooperative and mutually helpful living through activity and behaviour instead of being a passive receptacle there. The child's mind is not to be regarded as an empty reservoir and the classroom as a place for filling the child's mind with certain fixed or conventional facts and ideas. In the classroom the child should be helped to come into real touch with *life,* to feel active participation in *actual living.*

Thus we find that Dewey gives not a static but a *dynamic* conception of the aim of education which is supposed to be a universal process aiming at the all-round development of body, mind and character. The child's own *life* should play the vital role in the school curriculum and not the subject-matter , if he is to be properly educated or trained. Educational method and activity should be based on the instinctive activities of the child and not on the presentation of the external material. The children should be introduced into the complexities of modern living in the school, if they are to be full-fledged citizens capable of meeting the responsibilities of the society they live in. This cannot be done by mere drill studies in memorization of text-books and lessons prepared for them by the teacher. It is to be achieved through occupational training, *i.e.,* through training based on the real pursuits of life, on the wholesome activities normally undertaken by the children in their day-to-day lives. To Dewey, therefore, like Pestalozzi, the ideal school is to be on the model of the ideal home where the child has an active share in give-and-take experiences through plays, conversations and common pursuits of everyday life. As William Boyd observes: "The school, in fact, should be an enlarged family, in which the discipline which the child receives more or less accidentally at home is continued in a more perfect form, with better equipment and more scientific guidance. It should not be a section of life all by itself, cut off from the rest of the child's experience."

According to Dewey, the existing schools are aloof and isolated from the conditions and motives of real and ordinary lives. The present school system is a legacy of the Middle Ages. It does not reflect the life of the larger society, of the world outside. The children here are mere *passive listeners*. Their attitude of passivity and lack of active interest show that the children do not *live* there. The immediate effect has been a paralysis of intellectual initiative and a moral failure ; for, the intellect is trained only through active participation in some purposeful activity, and moral education can only be imbibed by sharing in the common aims and needs of society. The mechanical amassing of facts, the rigid curricula, the unvarying fixed method, the treatment of the children as masses and not as individuals—all these indicate that 'the centre of gravity in education lies elsewhere outside the child.' This state of aloofness and isolation causes a terrible wastage and consequent frustration in education. This system produces selfish individuals, misfits in society.

The great problem is to unify the whole. John Dewey has tried very much to harmonize the conflicting ideals of education, viz., individualistic and socialistic. He holds that 'the individual mind is a function of the social life.' As such, the individual mind requires for its harmonious development 'continual stimulus from social agencies.' Individuality finds its food and nutrition in social supplies. Hence true education consists in harmonizing the individual and social factors, because, only out of this harmony, the individual's inherent capacities develop to their fullest extent, and the highest welfare both of the individual and of the society is ensured. Modern education is being greatly influenced by this *unifying* idea.

John Dewey has infused the scientific spirit and gospel of *'learning by doing'* into every secondary school worth the name. According to him, education must be viewed in terms of individual experience, and the child should be made to be active. His natural tendency and inclination of inquiry, constructiveness, communication, artistic expression, etc., should find ample scope in his school career. The child should be made to feel conscious that he is a member of the society and that his efforts are worth pursuing. For this purpose the school should be socialized and properly affiliated to *life*. Hence various forms of active occupations should find place in the school curriculum, the aim of these occupations being not economic value of the product but development of the child's latent abilities as well as creative interests through them. Dewey insists on presentation of the out-of-school activities in the occupations of the classroom in miniature, to provide healthy conditions of personal interest in studies, *i.e.,* in what is to be taught and learnt in the school. As William Boyd has rightly remarked, "It is work that appeals to children. A great many of their own plays are simply miniature and haphazard attempts at reproducing social occupations. By employing occupations systematically and giving them a definite place in the work of the school, there is ensured the healthy personal interest in learning which is the precondition of all real education."

What kinds of active occupations are to be introduced in the school curriculum? In Dewey's opinion, the typical conditions of social life are determined by the ***industrial activities,*** and hence they should have the most prominent place in the course of a school. Through these activities the child's instinctive and impulsive urges can be harnessed to desired end both for personal development and for social well-being. These activities being as real as the tasks of actual life, the pupils will feel genuine interest in carrying them out and will easily attain the capacity for self-activity and self-direction which is so essential in life. Weaving, sewing, cooking, wood-work, shop-work, etc., may serve as introduction to other kinds of industrial activities or manual occupations. Such activities are far more expressive of real life than the formal and stereotyped occupations of Froebel's Kindergarten. There is the lack of real purposive element in the Kindergartens of Froebel who has advocated construction of beautiful things in mechanical ways. Dewey has emphasized the importance of the real ordinary activities and practical experiences of life in the method of education and is regarded as the father of the Project and Problem Methods. The Project and Problem Methods are the practical outcome of Dewey's educational philosophy. Instead of learning lessons passively under the directions of the teacher, the pupils are faced with some tasks to be accomplished and some problems to be solved; and in the course of accomplishing the task and solving the problem, they acquire considerable knowledge and skill. While the Montessori Method of child-centric education has made the school-house a place of joy and beauty, Dewey's system of education through the activities of real life seeks to make the school 'a society in miniature', and education, life itself. The process of education, for Dewey, is not 'something fixed and ready-made, outside the learner's experience'; it is rather a 'continual reconstruction moving from the child's present experience out into that represented by the organized bodies of truth that we call studies.'

By way of criticizing the Project Method, Professor G. H. Thomson has observed: "All I am saying is that a judicious mixture of regular drilling with incidental learning is probably best; the mixture of 'mastery' periods with 'expression' periods . . . . . has been preached so effectively by Washburne of Winnetka. A man's best work is done as play, and a boy's too: but both the man and the boy need and welcome opportunities for being definitely taught and drilled in the weapons necessary to prosecute their play-time occupations. The commonest fault in the successful school which is proud of its many examination results is that everything is apt to be teaching and drill, and examination results, necessary as they are, are not worth the loss of adventure and joy. The really clever schoolmaster is he who can cunningly use the one to help the other." In advocating learning through the real activities of life for which Dewey is regarded as the father of the Project Method, he has not, in fact, meant 'incidental learning' or 'learning wholly by doing.' His idea is that instruction in the school should generally be carried out through the real activities which the children do themselves suggest. He insists that the children, whenever feasible, should be given intellectual responsibility for selecting the fittest materials and instruments and an opportunity to think out their own model and plan of work.

Thus we find that the children were 'introduced into the complexities of present-day living through simplified experiences and terms they could understand'. Graves puts it, "The children learned *to do by doing,* rather than by merely listening, and were prepared for social efficiency and participation in democratic society not by mere passive obedience but by acquiring the necessary *social insight* and initiative, and meeting the responsibilities of that *society.*" Thomson says, "Dewey's school must be a *doing school,* and therefore a *thinking school.* To the divorce of thinking from doing also he traces the departure of true interest from so much of school work. In the out-of-school occupations of children he finds the keenest interest and tremendous effort. He does not find there that effort and interest are opposed or separable, and he wants them recombined in the school work. Hence the Project Method of the followers * * *—."

There is, indeed, the necessary balance of action and thought in Dewey's system of elementary education through the ordinary modes of activity like sewing, weaving, wood-work, shop-work, etc. Through these activities it is possible 'to secure a balanced interaction of practical and theoretical attitudes', which is the aim of education. "There is involved both active self-expression through the physical organs (hands, eyes, etc.) and continual observing, planning and reflection; and in the background is a whole wide range of intellectual, aesthetic and moral interests,"—thus observes Professor Boyd.

The three R's, *e.g.*, Reading, Writing and Arithmetic, according to Dewey, grow out of and are connected with the children's real activities. The mind, he points out, is essentially *social*. It is made what it is by society and depends for its development on the social environment. The mind being a function of social life, the requirements of instruction cannot be met by merely bringing the child into direct relation with various masses of external facts labelled Geography, Arithmetic, Grammar, etc. These studies, it has to be remembered, have grown out of social needs. The children must be made to re-live the situations out of which they grow, and re-discover them. A fine training in oral expressions is possible through industrial activities, because such activities provide children with manifold experiences about which they want to talk. Thus we see that Dewey advocates the establishment of vocational schools to keep pace with the rapid development of modern science and various scientific inventions and discoveries. For Dewey the curriculum is concerned with the realities of child-nature and of actual life. Its content is to be selected from different activities of real life, the determining principle being the natural tastes, interests, aptitudes and inclinations of the child at the successive stages of his development. Dewey stresses the *child* rather than the book, or the subject-matter, or the teacher.

By pleading for vocational education, Dewey has not meant that particular lines of occupation or profession have to be thrust upon the pupils. Only a vocational *bias* is to be given from an early age, so as to enable them to choose their own professions or vocations rightly in future when they become grown-up citizens. By such education the children will gradually discover their own tastes, aptitudes and inclinations and will have scope for proper development of the artistic, aesthetic and expressional or creative aspect of their mind.

Dewey considers the mind not as 'a fixed entity' but as *'a process of growth.'* The mind must be thought of 'as essentially in change, with the continuity of growth and yet presenting different phases of capacity and interest at different periods.' This idea of mind as 'a unity in process of development' calls for a selection and grading of the courses of study at different periods by means of experience and experiment. Dewey's elementary school consists of the *three* following periods of life on psychological grounds:

(*i*) The play period from 4 to 8 years of age;
(*ii*) The period of spontaneous attention from 8 to 12;
(*iii*) The period of reflective attention from 12 onwards.

The central theme of studies in the play-period should be the life and occupations of the home guided directly by social and personal relations. Reading, writing and systematic treatment of geography are to be introduced only in the last year of this period. During the period of spontaneous attention, the child acquires different forms of technical skill to secure for himself 'practical and intellectual control of such methods of work and inquiry as will enable him to realize the results for himself'. The period of reflective attention comes with the mastery over the methods of thought, inquiry and activity and enables the child to specialize in distinct branches of studies and arts for remote technical and intellectual aims. Dewey's programmes of study for this period have not, however, been adequately worked out.

The most important feature in John Dewey's philosophy of education is *democratizing* education, *i.e.*, putting education on a *democratic* basis. After the First World War, the Imperial form of Government has changed into the Democratic form of Government in most of the advanced countries. The democratic tendency has extended from the domain of Politics to *Education* also, so that education in modern times is going to be adapted to the changing needs of the times. Dewey's ideal is to prepare every member or individual as a complete and true citizen of the State which is democratic. The individual must have the power to exercise his right of franchise intelligently. Dewey's ideal of complete citizenship implies also various other things of which mention may be made of the following:

(*a*) Rearing of children and educating them properly,
(*b*) Earning livelihood,
(*c*) Cultivation of social sympathy (love, fellow-feeling, co-operation, friendliness, etc.),
(*d*) Development of the sense of self-respect,
(*e*) Cultivation of Art, Science, Literature, Poetry, Fine Arts, etc.,
(*f*) Leisure-hour occupations,
(*g*) Health and physical well-being,
(*h*) Power to command and also to obey others.

For each of these operations a thorough scientific training is necessary. In this respect Dewey's views are exactly similar to those of Herbert Spencer who maintained that for each of the items of living, a knowledge of the corresponding science is of great value. For preparing a complete citizen, what is most essential is the spread of *mass elementary education* on a democratic basis. The school should provide opportunities for fashioning the faiths and practices of the democratic way of life.

Again, according to Professor Dewey, teachers should have the explicit right to share in the shaping of the policies they are to execute in the administration of the school they are to look after. Education for being effective must be democratic, and in a truly democratic system, the greatest benefit can accrue only when the greatest number can actively share in making the system run as it should run. Professor Dewey puts it thus: "Full education comes only when there is a responsible share on the part of each person, in proportion to capacity, in shaping the aims and policies of the social groups to which he belongs."

Dewey's experiment at Chicago University Laboratory School has been followed by similar experiments in America and other progressive countries of the world. The principles that underlie such experiments are:

(*a*) That methods of education must be developed inductively without unnecessary regard to tradition;

(*b*) That activities of some kind should have a fundamental place in the school regime.

These two principles can be clearly discerned in the Polytechnization Scheme of Russia and the Wardha Scheme of Basic Education.

Dewey's philosophy has had a vast influence not only on American Schools but also on educational systems all over the world, especially in the Far East and in Russia. The educational system in China is largely based on the ideas adopted from Dewey's writings. Free India is also no exception. In his Address to the Convocation of the University of Calcutta in January, 1955, our learned ex-Vice-Chancellor, the late Dr. J. C. Ghosh very rightly advocated a system of *'community-structured'* education for prevention of the enormous wastage and the consequent frustration in our presentday collegiate education particularly in the overcrowded colleges in the biggest city of India. In the following excerpt from his Convocation Address, it will be seen how Dr. Ghosh's plan is in full accord with the principle enunciated by the American Philosopher, John Dewey:

"I recognize .... that if planning is to be efficient and unemployment is to be minimized, the educational system should more and more be *community-structured, i.e.,* so designed as to take the account of the means by which the country exists and prospers. There can be fewer things more pathetic for individuals nor less for a people as a whole, than they should be educated for a way of life that does not exist. Unless education is mostly community-structured, with an eye to the future, it will be bad education because it will fail to secure and develop the material basis upon which such a life depends. Hence it should be accepted as a general principle that education should include practical instruction of a realistic and contemporary character appropriate to the life of the community. In an Address to the Convocation of this University, which I had the honour to deliver in 1947, I, therefore, pleaded that the future expansion of post-Matriculation education in this city should mostly centre round the concept of *occupational institutes.*"

The educational philosophy propounded by this great philosopher is embodied in his little book, *'The School and Society'*, published in 1899. His general theory of learning is presented in *'How We Think,'* published in 1910. In *'Democracy and Education'* published in 1916, we find a final statement of his educational philosophy. Here we follow clearly John Dewey's concept of education as *growth* and *experience,* his emphasis on the need for a free and flexible society, if that education is to flourish and in turn further promote such freedom. To John Dewey, democracy is a moral ideal, it is a *way of life.* And because the meaning of democracy has been so constant a theme in Dewey's work, he stands all the more prominent in the world today. The true test of *democracy,* for Dewey, lies in the flowering of individuality from the educational process best suited to its development. 'And it is characteristic and characteristically American that he should conceive of philosophy itself not as contemplation of changeless being, but as the projection of working ideals through shared experience by scientific method.' The application of democratic principles in instruction revolutionized the educational system in the United States of America.

Dewey's little book, *'Experience and Education'*, published in 1938, is a major contribution to educational philosophy and offers educators and teachers a positive philosophy of education. It contains a lucid analysis of both traditional and progressive education. It evaluates the principles and practices of both the traditional and the progressive schools, pointing out the defects of each of them. Here the author has emphasized the value and importance of *experience, experiment, purposeful learning, freedom,* and other well-known concepts of progressive education. In '*Experience and Education*', the meanings of *freedom, activities, discipline, control* and *organized subject-matter* have been expounded within the context of educative experience as a process implying both continuity and interaction. The experience which Dewey speaks of does not occur in a vacuum. He remarks, "There are sources outside an individual which give rise to experience. It is constantly fed from these springs. No one would question that a child in a slum tenement has a different experience from that of a child in cultured home ; that the country lad has a different kind of experience from the city boy, or a boy on the sea-shore one different from the lad who is brought up on island prairies. Ordinarily we take such facts to be granted as too commonplace to record. But when their educational import is recognized, they indicate the second way in which the educator can direct the experience of the young without engaging in imposition. A primary responsibility of educators is that they not only be aware of the general principle of the shaping of actual experience by environing conditions, but that they also recognize in the concrete what surroundings are conducive to having experiences that lead to growth. Above all, they should know how to utilize the surroundings, physical and social, that exist so as to extract from them all that they have to contribute to building up experiences that are worth while."

Like Horace Mann (1796-1859), the greatest among the founders of the American system of Free Public Schools, John Dewey believed in education for *all* men. Writing in 1939, Dewey said:

"Government, business, art, religion, all social institutions have a meaning, a purpose. That purpose is to set free and develop the capacities of human individuals without respect to race, sex, class, or economic status. And this is one with saying that the test of their value is the extent to which they educate every individual into the full stature of his responsibility. Democracy has many meanings, but if it has a moral meaning, it is found in resolving that the supreme test of all political institutions and industrial arrangements shall be the contribution they make to the all-round growth of every member of society."

Dewey's influence has been tremendous—not merely upon professional philosophy but upon the entire field of education and upon social thinking all over the world during the last seventyfive years. In the words of Leonard Carmichael, "Dewey, as philosopher, logician, and educator mirrored the changes of his times, but he was also one of the few individuals whose new outlook on man and society did more than a little accelerate the movements which have made the twentieth century intellectually what it is." Both in philosophy and pedagogy his views still prevail, as forceful as before and more convincing than in the past.

The chiefest contribution of Dewey to educational thought lies in his enunciation of the aim of education as 'securing a balanced interaction of the theoretical and practical attitudes' of the educands. In his application of the *activity principle and method* in education, however, we notice a difference from the Wardha Scheme of Basic Education formulated by Gandhiji, and perhaps, Dewey was justified on this account. The industrial activities and occupations prescribed by Dewey were intended for *liberalizing* rather than technical purpose, and 'considerable time was given to an historical study of them'. The industrial history of man, according to Dewey, is not merely a utilitarian affair; it is a matter of intelligence and its record is the record of how men learned *to think.*

One can count on the fingers of one hand those twentieth-century Americans whose thought and leadership have made a decisive and permanent impact on their countrymen. Except for political figures, surely the name of John Dewey is the first one to come to mind in such a context. He holds a unique position in American thought. He is the sponsor and forerunner of the movement known as *'progressive education'*, which is one of the most significant trends in modern education. The world will long remember the signal contributions of this great American philosopher-psychologist-historian-educator in the domain of philosophy, psychology, history and education. Whether in terms of *democracy,* or *freedom,* or *experience,* or *education,* John Dewey's concepts, doctrines, and seminal ideas have been, are, and will be tremendously influential in the life and thought of many generations of people in different parts of the world.

CHAPTER 9

Montessori, the Mother of the Children's House
(1870 - 1952)

MARIA Montessori was born in 'awakening' Italy in 1870, just 'a year before Italy finally became a single nation'. Like John Dewey, Montessori, too, is said to be 'a product of her times' in as much as "she grew up", as Cole observes, "in the stirring times that followed upon the establishment of Italian unity and independence". She received *scientific* rather than classical education. She studied Medicine. In the words of Boyd, "In defiance of prejudice, she entered the University of Rome as a medical student, and was the first woman in Italy to receive the degree of Doctor of Medicine. She began the practice of her profession, but a greater work was awaiting her."

Madame Montessori started her career as an Assistant Doctor at the Psychiatric Clinic of the University of Rome. During this time her attention was drawn to the feeble-minded or mentally defective children who were housed in lunatic asylums. Now, she began to consult the works of the well-known Italian anthropologists like Giuseppe

Sergi, Lombroso, De Giovanni, and others. She also studied carefully the method devised by the French physician Edouard Seguin for the treatment of feeble-minded children through drugs and medicines. At first working on the lines laid down by the latter, Montessori came to the conclusion that mental deficiency called more for *education* than for medical treatment. and hence the best and surest method of treating these children must not be through medicines and drugs but through proper *education.* She discovered that feeble-mindedness is mainly due to the 'dullness' of the senses, and that if proper *sense-training* can be given to such mentally defectives, they will be able to *learn* and acquire knowledge. She declared, "I felt that mental deficiency presented chiefly a *pedagogical* rather than mainly a medical question."

As a result of her constant strong advocacy of the above view, Madame Montessori was invited in 1898 by the Minister of Education to deliver a course of lectures before the teachers of Rome where she lucidly explained her standpoint. These lectures were so convincing and aroused so much interest among the audience that a school for the cure of the feeble-minded children, called the *Orthophrenic School* was founded in Rome and Dr. Montessori became its Directress. In this institution she not only trained special teachers for this school but actually taught the children herself. She began her work as early as eight in the morning and continued till eight in the evening. The feeble-minded children attending this school showed marvellous progress in academic subjects. Dr. Montessori worked here for two years from 1898 to

1900. Not being 'content with her own experience' she, with a view to improving further her method of educating the mentally defective, visited London and Paris and acquired fresh knowledge and experience in this direction. Under her care, supervision and guidance it was found that dull and idiotic children passed the State examinations in reading and writing prescribed for normal children.

From the experience thus gained, Madame Montessori thought that similar methods might also be applicable in the cases of the normal children of lower age, and she directed her attention to the education of the latter. It seemed to her that if backward children by educational means could be made to overtake and compete with normal children, it is quite possible then to achieve still more striking results with normal children, who, by means of her newly devised educational scheme, would surely show better progress. In 1900, Madame Montessori resigned her post as Directress of the *Orthophrenic School* and re-entered the University of Rome to study Philosophy, Experimental Psychology and Anthropology with a view to working out scientific theories and methods of the *pedagogy* she wanted to develop. After a series of successful experiments she introduced her methods in certain public and private infant schools of Rome. At first she had to face great opposition from the orthodox sections of the people who denounced her system as being subversive of discipline. But all the same she was highly appreciated by some zealous reformers. During the earlier part of this century Dr. Montessori lectured on Pedagogical Anthropology at the University of Rome. She was subsequently appointed Government Inspectress of Schools in Rome.

In 1907, an opportunity came for applying her theories and principles to the right test of practice. The Director of the Roman Association for Good Building, a philanthropic association, drew up a plan for erecting a school attached to each tenement, where little children between the ages of *three* and *seven* could play and work under the supervision of a teacher residing with them. In that year, the first of the 'Children's Houses' (*Casa dei Bambini*) was started by Dr. Montessori. A year in the *'Casa dei Bambini'* justified her hopes. Here she applied to normal children the same method which she had found successful with feeble-minded children. Her efforts were crowned with success.

During this time she evolved a method known as the *Montessori Method* for educating little children, in which she laid stress on *three* things, *viz.,* (*i*) sense training, (*ii*) study of the child's individuality, and (*iii*) freedom. Dr. Montessori's wonderful power of observation, her keen insight into the minds of children, genial behaviour, sympathetic attitude—all these, combined with her scientific outlook, enabled her to devise the new technique of education. Her preliminary ideas and principles of education were embodied in her masterpiece, *'The Method of Scientific Pedagogy applied to Infant Education in the Children's Houses'*, otherwise known as *'The Montessori Method'*, published in 1912. The book has been translated into English and various continental languages. The following beautiful lines occur in this treatise: "Humanity shows itself in all its intellectual splendour during this tender age, as the sun itself at dawn and the flower at the first unfolding of the petals. * * * * * and we must respect, therefore, these first indications of individuality religiously and reverently. If any educative act is to be efficacious, it would be only that which tends to help toward the complete unfolding of this life."

Dr. Montessori borrowed the idea of the *Didactic Apparatuses* largely from Edouard Seguin who had applied them in the treatment of abnormal children, but she applied these in the education of *normal* children. Like John Dewey, Montessori also maintained that the main problem of child education is the question of *adjustment* to the immediate environment, in which process the educator is to play the role of the Organizer, the Guide, the Directress. The function of the Directress, in Montessori's opinion, is not one of passivity but rather of "anxious scientific curiosity . . . . . the teacher must understand and feel her position of *observer*". Madame Montessori advocated that her method was adequate enough (*i*) to develop the muscles, (*ii*) to impart proper sense training, and (*iii*) to inculcate the spirit of freedom and self-reliance in children. As regards 'freedom', she said, "If a new and scientific pedagogy is to arise from the study of the individual, such study must occupy itself with the observation of *'free children'*."

Dr. Montessori then went on establishing various 'Children's Houses' (*Casa dei Bambini*) and travelled widely over different parts of the world with a view to acquainting the people with her new techniques and methods of child education and popularizing them in their midst.

In order to fully appreciate the contribution of Montessori to educational theory and practice we must have a clear idea of what educational practice meant in those days of unrest which marked the dawning of the present century. Education, according to Montessori, had hitherto been 'hard', concentrating mainly on the *'mind'* and subordinating all else to the *mind.* There was always an over-emphasis on *intellect.* Although people had lost their faith in the old system of education, yet the educational institutions bore every mark of antiquity, and Goldsmith's *Village Schoolmaster,* with his 'words of learned length' and thundering sound, was still reigning supreme with his rod which he could not spare lest the child should be spoilt; and—

> "Full well the boding tremblers learnt to trace
> The day's disaster from his morning face."

All that people cared to demand of a teacher was if he could 'gauge and cipher too' and could maintain the discipline of the rod. Dr. Montessori while describing the merits of her 'Children's House' holds out before us a vivid picture of the *'old-time teacher'* whom she has displaced. "In the Children's House", she says, "the old-time teacher who wore herself out in maintaining the discipline of immobility and who wasted her breath in loud and continuous discourses has disappeared." Let us see what she has substituted for the teacher. To quote her words, "We have substituted the didactic material which contains within itself the control of error and which makes *auto-education* possible for each child. The teacher has thus become a *Directress* of the spontaneous work of the children. She is not a passive force—not a mere silent presence." Montessori teachers, therefore, are not called 'teachers' but *Directresses,* just as Froebelian instructors are termed benevolent *Superintendents.*

So much about the *teacher.* Add to this, her view of the *child,* and we have a complete philosophy of the *Montessori Method.* The children are occupied each one in a different way; the Directress watching them can make psychological observations, which, if collected in an orderly way and according to scientific standard, should do much toward the reconstruction of Child Psychology and the development of Experimental Pedagogy. She advocates that education must be *individual.* The class may be retained only as a *unit of organization* but not as a teaching unit. As a teaching unit, the class is dead and buried. And probably Dr. Montessori has tolled the 'knell of class-teaching'. The disease which has caused its death has spread all over the country.

The fundamental creed underlying Dr. Montessori's principles of education is, as we have already stated, *freedom.* She has practically revolutionized the whole trend in education. In the old order of things the liberty of the pupils was not only unthought of but really taken to be frightening in its consequences. She said, "We do not know the consequences of suffocating a spontaneous action all the time when the child is just beginning to be active; perhaps we suffocate life itself." She was an apostle of *child-emancipation.* In her opinion, discipline can come through *liberty* which has for its essential mark 'activity'. *Freedom first, freedom second, and freedom always*—this is the watchword of Montessori method. This freedom, however, is not to be taken to mean absolute licence but it involves, on the contrary, some sort of creative work on the part of the pupil. Licence is not desirable under any circumstances of life. As Sir John Adams puts it, "There must always be some ultimate source of authority. . . . . Let the teacher give the pupils as much rope as he can without disaster to the class as a whole, but he must retain in the last resort the power of intervention and veto." The Montessori teacher, therefore, is to 'stand by', refraining from fussy interference but ready to lend a helping hand whenever necessary. She is also to keep a minute record of each child's progress like a watchful mother. Dr. Nunn has aptly remarked, "The teacher's part in short, in all matters, is that of a perpetual President in the little Republic where the onus of school government is thrown upon the governed."

The old conception of discipline was negative—it was rather a coercion to 'immobility'. But real discipline does not aim at reducing children to *'immobility'* in the classrooms like 'rows of butterflies transfixed with a pin'. Such children are not actually disciplined but annihilated. An individual is said to be disciplined only when he is a master of himself and can, therefore, regulate his own conduct, and not merely when he has been rendered as artificially silent as a mute and as immobile as a paralytic.

Discipline, in the positive sense of the term, is the result of the gradual building up of the habits of self-control and self-direction, and this will be accepted by the pupil and carried out not because it is imposed from above but because of his recognition of its necessity and value. There should be no external restraint, no fixed routine work nor absolute rigidity as in our traditional class-teaching. There is not even a fixed time-table in the school. Children will work according to their own rate, will progress according to their own speed and engage themselves according to their sweet will. And this discipline to which the child habituates himself here is not only limited to school-environment but extends to society at large and in the ways of the oủtside world.

While upholding the cause of the liberty of the child for the complete unfolding of life, Dr. Montessori is not blind to the offending and annoying propensities in some children. The liberty of the children, according to her, should have as its limit the collective interest and should have as its form what we universally consider to be good breeding. We must, therefore, check in the child whatever offends or annoys others, or whatever tends toward rough or ill-bred acts. The very first idea that the child must acquire, in order to be actively disciplined, is the difference between *good* and *evil*; and the task of the educator, as she says, lies in seeing that the child does not confound 'good' with 'immobility', and 'evil' with 'activity', as happens to be the case in the old conception of discipline. Our aim is to attain discipline for activity, for good—and not for immobility, passivity and unquestioning obedience.

The psychologists have emphasized the great importance of the instinctive impulses of the child in education.

The instincts, as we know, are the raw materials of character and the prime movers of action; and any attempt at thwarting them is not only futile but dangerous in its consequences. It is the considered opinion of the experts that in the early stages of intellectual education, appeal must be made through instincts. We must make a start by utilizing the motives *that are there.* A child is a bundle of innate impulses and instincts which are not fully developed at birth, but each appears inevitably at its proper time. Dr. Montessori maintains that the work of the educator lies in the direction and guidance of these instincts when they really make their appearance. In matters of conduct, an appeal to the moral sense which is naturally dormant in the child is quite useless. The best way to make a child abandon an instinctive activity is to substitute another for it, and this may be described in psychological terms as the *channelling* or *sublimating of the instincts.*

Thus we find that freedom of movement was the rule, provided 'it did not transgress the borders of good manners, social order and harmony.' Montessori proved that on these lines an astonishingly perfect discipline can be built up even with quite tiny children. In her opinion, the fundamental attitude of scientific pedagogy must be the *liberty* of the pupils. The teacher's function should be to study the free activities of children. There should be no fixed and enforced exercises imposed by the teacher on the pupils, but the pupils should select their own tasks, solve their own difficulties and problems, and should be allowed to develop themselves unhampered bodily and mentally. But whenever they are found misguided in their activities, they should be checked by the teacher. The Doctor set herself to devise means of training which would fulfil these conditions and whereby the children could work happily together, moving independently to and fro as in a community of adults. In working out her plan of free education she made use of all kinds of occupations—the tasks of daily life, plastic work, sensory exercises, and so on, all of which are the indispensable instruments for the successful application of her doctrine of '*auto-education*.'

Auto-education or 'self-education' or 'free education' has been discovered as the best means for the proper intellectual growth of children. Some sort of creative work and sensory exercises are included in the curriculum, and the guiding principle, as Montessori advocates, is always spontaneity or freedom. Another essential principle in her system is the training of the muscles through a course of gymnastic exercises tending to aid the normal development of physiological movements such as walking, breathing, etc. Montessori believed that a thorough training of the senses leads automatically to a variety of useful muscular coordinations. In the first stage of education the pupils should have both the sense and muscle training through freedom. And hence the Doctor has replaced the fixed tables, heavy benches, and such other furniture by light, flexible and easily movable ones so that the pupils can be free to touch, handle and lift them, whenever and wherever necessary. In this process they have ample opportunities to have their muscles exercised.

The chief contribution of Dr. Montessori to the pedagogical advancement of the present times is her tendency towards the application of the scientific methods of *observation* and *experiment* in regard to educational problems. She is a sympathetic observer of child-nature, a dispassionte and ardent reformer and a practical teacher. She has demonstrated in her 'Children's House' a great aesthetic skill in the arrangement of 'didactic material'; and her intelligent manipulation of the pupils' natural instincts speaks of a high order of ingenuity in her profession. She advocates the importance of 'sense-training' in the early years of childhood and maintains that the external world enters into the mind through the gateways of the senses. To this end she has devised in her 'Casa dei Bambini' the Didactic apparatuses for the training of the different senses.

The child trains the different sense-organs by means of various exercises—all with the help of certain specially prepared appliances—those 'Didactic apparatuses'.

The Didactic apparatuses are of various kinds, of which special mention may be made of wooden cylinders, rectangular tables, musical bells, woollen balls, beads and buttons, closed boxes of different shapes and sizes, pianos, and so on. First of all, the child develops the power of the perception of sight which is the most important of all the senses, and then step by step he develops the power of the perception of hearing, touch, feeling, etc.

The senses by which our knowledge is mainly acquired are the senses of sight, hearing, and touch, the last being the most delicate. Wooden cylinders, rectangular tables, pyramids, etc., are placed before the children to train their eyes to the differential perception of dimensions. For training the perception of form, geometrical shapes fitting into frames are used. Musical bells, pianos, closed cylindrical boxes identical in shape and size but containing different things are given to train the sense of hearing and to enable the children to discriminate sounds. The pupils learn low sounds, loud sounds, musical notes, and so on. When the organs stop, stillness reigns in the room and the children remain silent and learn what perfect stillness or silence is. Besides these, there are various kinds of games and other lessons in silence. Sand paper, wax, woollen balls, etc., are used to give the pupils the idea of roughness and smoothness. They may be taught height and thickness by placing some dolls on the table, some of ten inches, others, say, of eight inches, some, still less fat, and so on. Idea of colour may similarly be impressed on the children's minds by showing them some articles of different colours. Different shades of wool, brown prisms, rods coloured green and coloured alternately red and blue are placed before the children to train their perception of colour.

While training the senses, the Directress must lead the child from sensations to ideas, from the concrete to the abstract, and to the association of ideas. As for example, touching the smooth and rough cards in the first tactile exercise she should say—"This is smooth" and "This is rough." While dealing with the sensations of heat and cold, she must say—"This is cold" and "This is hot", and so on. This kind of sensory training paves the path for later intellectual development in children.

With the aid of these methods Dr. Montessori thinks that she could arouse in the young child keen interest and attention. Little children of ages varying from *three* to *four* would repeat an exercise with an air of concentration and indifference to surrounding distractions. Such a period of work might continue for a quarter of an hour, and the child would take to other pursuits in a similar way. Moreover, the child did not feel tired, as after an enforced effort, but rather looked refreshed and reinvigorated. Indeed, disorderly children, those of a type likely at any moment to lapse into indiscipline, invariably required inward stability once they had entered upon this form of spontaneous work. The teacher in the second and subsequent years of class formation had very little to do except to watch and observe and maintain order, *standing by.*

Now, a question might be asked as to what it is that Montessori achieves by means of all these elaborate sensory exercises. We should not, however, assume that the sense-organs themselves, or the sensory areas in the brain, are hereby developed. What is actually trained is the child's power of perception, discrimination and interpretation of sensations, the educational utility of which cannot be denied. The child can refine his senses through an exercise of attention, comparison and judgment, and these exercises are no doubt true intellectual exercises. But it is extremely doubtful, as her critics point out, as to 'how much of the training obtained in so limited a field can be transferred to the seeing and hearing of other things, and how far our children are able to carry the utility of this training to other spheres of mental activity'. "If a child is able to make fine distinctions in the matter of a colour-band or in sorting different articles according to weight, it does not guarantee that he will be able to make accurate estimates of other people's motives and purposes, or that he will always discriminate in his tastes and choices". Modern psychologists do not now believe in the doctrine of 'transfer of training' except only in alike and identical situations, nor do they find it possible to maintain that the training of the senses leads to a general intellectual development.

We see, therefore, that in the Montessori curriculum, the *training of the senses* assumes the greatest importance, for she maintains that out of systematic sense-training the pupils are prepared for learning even the three R's in later school-life, and they can become fit for the duties of practical life also. Besides this, the children are taught to dress themselves, to make themselves clean, to sweep the rooms, scrub the tables and keep the school furniture and apparatuses in tact. When the child first enters the school, his attention is first drawn to the household duties like setting the table, serving a meal, washing the dishes, and so on. But, after all, sense-training is the corner-stone of her system.

Let us now pass on to the Montessori method of learning the three R's. After the sense-training is complete the child learns the modes of Reading and Writing. The method here is very attractive and also successful.

Dr. Montessori maintains that the spectacular performance is of little value. All the tactile, dimensional form and visual training lead naturally to the writing co-ordination. Montessori has further invented three other exercises by which the spontaneous development of the graphic language becomes easier. First, the muscular mechanism to hold and use the instrument in writing is developed by the child's filling in the outlines of a geometrical form that he traces upon paper. During this period, the child is also engaged in exercises tending to establish the visual-muscular image of the alphabetical signs by means of sand paper letters mounted on card-board. The teacher shows the child how to follow the contour of a letter with the finger as if writing it and at the same time she helps him to pronounce the sound but not exactly the name of the letter, and then she further exercises his memory by saying, "Give me 'O'," "Give me 'I'," and so on, and also by asking "What is this ?", "What is that ?", and so on. The child also draws straight, vertical, horizontal and curved lines which may ultimately be transformed into letters. Lastly, the child is exercised in the composition of words. In such exercise he is to select unmounted card-board letters which are kept in compartments of a set of boxes. Through these kinds of exercises, the child is not actually taught to write but comes to learn the necessary process of writing. This art is learnt so unconsciously that the pupil begins it almost spontaneously and writes before he realizes it. The boxes containing the letters are very handsome to look at and very interesting to handle. The pictures and letters there are also very nice. In a sense the child moves there in a very happy atmosphere of beauty. We must make the path of the children's learning one of smoothness, pleasure, joy and gracefulness. The Montessori class-rooms are beautifully painted by the children themselves. Thus, there is an awakening of the sense of beauty in the minds of children from the very early years, and even before they begin to learn to write. This is all about the writing method devised by Dr. Montessori, which is undoubtedly a very good achievement and a great contribution.

The two other subjects in her curriculum are Reading and Arithmetic. Reading is taught with the help of slips of paper or cards upon which are written, in clear large script, words and phrases. In addition to these, there is a variety of toys. The teacher sometimes takes a letter, say, 'c' and asks the child to find out the same on the painted wall. She says, "Go and find out the letter on the wall, representing the letter in my hand". In this way the child is trained in a very interesting manner. There on the wall the child tries to put that letter on 'a' but it does not match. Then he tries it on 'b', and then on 'c'. Now he sees that it matches and he cries out in joy. There may also be the picture of a 'cat' over the word and he is taught the pronunciation of the word, and he is taught the three letters c-a-t in a correct manner from now. Children take a keen interest in learning things in this manner with great ease and in course of a very short time. Students sometimes write out some familiar names of objects on the board or cards and then repeat the sounds of those words with the help of the teacher very distinctly until the words *as wholes* and not as mere successions of individual sounds are imprinted on their memory. When several words are learnt completely in this way, attempts are then made to frame short phrases and sentences. Some stories are dramatized, and the drama is staged. Children themselves take up sometimes the task of dramatizing the stories; all of them try and the best versions are accepted. Here, of course, the children do everything themselves at their own initiative, *viz.*, the arrangement of screens and scenes, dressing, painting, and so on. Besides these, there are songs with controlled movements, actions, gestures, dances, and so on.

The Montessori process of teaching Arithmetic is almost similar to that advocated by Pestalozzi. The method consists of several operations with rods of different length—each marked with two colours, say, red and blue, and divided into several sections. The child first of all learns to count the sections of rods. After he has learnt this perfectly, he is tested by the teacher who, taking a rod at random, asks him to find out the next longer or the next shorter rod. There are also beads, buttons, strings, scraps of paper, which are all helpful in giving the ideas of notation and numeration. Thus we find that the abstract counting process is taught in a very concrete manner. The children can work out sums before the age of six. Dr. Montessori also worked on materials for older children and perfected the ways and means by which they can individually study Grammar, Geometry, etc., and perform Arithmetical operations with large digits, fractions, and so on.

Then, again, for a thorough and comprehensive education of the child it is necessary to have him exposed to the vivifying forces of nature. It is also useful for his psychical life to place the soul of the child in contact with creation in order that he may lay up for himself treasure from the directly educating forces of living nature. The method of arriving at this end is to set the child at agricultural labour, guiding him to the cultivation of plants and rearing up of animals and thence to the intelligent contemplation of nature. The principal features of this method of Nature-study are as follows: First, the child is initiated into the observation of the phenomena of life. He stands with respect to the plants and animals in a relation analogous to that in which the observing teacher stands towards him. Secondly, the child is initiated into foresight by way of auto-education when he knows that the life of the plants that have been sown depends upon his care in watering them, and that of the animals upon his diligence in feeding them, without which the little plants dry up and the animals suffer from hunger; the child becomes vigilant, as one who is beginning to feel a mission in life. Thirdly, the child is initiated into the virtue of patience and into confident expectation which is a form of faith and philosophy of life. Fourthly, the child is inspired with a feeling for nature, which is maintained by the marvels of creation. Lastly, the child follows the natural way of the development of the human race. In short, such education makes the evolution of the individual harmonize with that of humanity.

The main characteristics of Montessori's lessons are their brevity, simplicity and objectivity, and they are all individual in character. In giving such lessons Montessori has indicated the method of 'observation' in which is included the liberty of the child, as the fundamental guide. It is interesting for the modern teacher to note in this connection the Doctor's warning to him about her psychological analysis of 'mistake.' The teacher must be warned against two things: first, not to insist on repeating the lesson, and secondly, not to make the child feel that he has made a mistake. The educator must, to the greatest possible extent, limit her intervention; yet she must not allow the child to weary himself out in an undue effort at *auto-education.* If the child makes a mistake, the teacher must not correct him but must suspend her lesson to take it up again another day. When the child has failed, we should know that he was not at that instant ready for that psychic association which we wish to provide him with. We must, therefore, choose another moment.

Madame Montessori, in her excessive zeal and enthusiasm for the training of senses in early childhood, is totally blind to the need for the development of children's fancy and imagination. In fact, she strongly condemns the use and study of fairy tales and fables on the part of little boys and girls on the ground that they may make children *dreamers* finding satisfaction only in the *unreal.* She is much dissatisfied with the wide popularity of fairy tales, because she wants to discourage the children in the weaving of fantasies. She has her stand on the psycho-analytic doctrine that the fantasies are to be regarded as 'compensations for repressed tendencies' and that they tend to be regressive in nature. On the contrary, she is extremely glad when she hears that children no longer believe in fairy tales. She apprehends lest the myths and legends should make them credulous. To quote her very words,—"To help children to delight in fables and fairy tales because this delight is *natural* to them is like compressing the gums of babies to prevent the teeth from coming out, because it is the characteristic of babies to be toothless." The true basis of imagination, according to Montessori, should be *reality*.

But we might point out that Montessori has over-emphasized her passion for truth and reality in respect of her attitude to fairy tales. Ross observes, "With such a narrow conception of the word *'truth'* a Shakespearean tragedy or any other great product of imaginative art would also be untrue". Moreover, she invests the little child with the virtues and characteristics of an adult which the child is not. Secondly, a certain amount of fancy and day-dreaming is really helpful in the lives of all alike in as much as they add a sauce to the dull and idle series of routine work, and there may also be constructive elements in them, which are likely to pave the path for creative and artistic geniuses later on. And after all, most of us are dreamers to a certain degree, and if at times we do not get idle and passive, and do not dream, and let our imagination soar, and allow our fancy to 'build castles in the air', our mind would have been left dull, cold and abstract without any joy or zest, and life would not be worth living. Neither the child nor the grown-up person lives by bread alone. Our children, therefore, can profitably be allowed to have a reasonable measure of fantastic imagination for which they have a particular fascination in their immature days. They, however, soon learn to keep their worlds of fact and fantasy apart from each other, thus proving the unsound character of Montessori's fears. We should rather support the arguments of Rusk that the proper defence of fairy tales is that they form part of the literary heritage of the race and as such ought to be known; and it may be that the early years of childhood, when the contradictions between the happenings of a fairy realm and those of a causally conceived world do not press heavily, may be the most suitable time for learning them.

The guiding principles of Montessori system are joy, freedom, spontaneity and activity. The Doctor believed along with other reformers in education also that education is nothing but a development from within and is never thrust from outside. Comenius and Rousseau, too, preached similar doctrines long ago. Still later thinkers in the field of education, namely, Pestalozzi and Froebel, though markedly differing in their detailed treatment of the principles of education, none the less favoured the doctrine of 'natural' education and contributed much to the freedom movement among school children. What all these educational reformers sought to emphasize is this that all interfering and restrictive influences have a bad effect upon the child. Hence there should never be any strain or effort on the part of the children to be educated. They have, in fact, brought into bold relief the old education of effort and the new education based on natural instincts and impulses, and have ingeniously reconciled the two in their theories of education.

*

Once the two great educationists met in Holland, Dr. G. S. Arundale, President of the Theosophical Society, and Dr. Maria Montessori, founder of the Montessori system, who was, for the time being, making her home in Holland. After a long talk on matters educational, Dr. Arundale made a statement to the press in connection with Dr. Montessori's proposed visit to India, and said that it was the belief of Montessori that if she could come into touch with the masses of the people here—the villagers, the peasants, and the like, as they are and as they live, she could successfully adapt her system to their needs, so that it evoked the soul of the people and helped it to grow along its own lines and in its own way. She further contended that education in India must be *Indian education,* a truth which many Indians even now seem unable to understand, so enslaved have they become to the western system under which they have long been *instructed* but not certainly *educated.* Afterwards Madame Montessori actually came to India and was most cordially received here. She met many of her disciples and followers and visited Montessori Schools in India. She expressed great satisfaction at the work done in these schools. She delivered interesting lectures at various places and held meetings, which were well attended. Her lectures aroused a great deal of enthusiasm and zeal among the audience.

By way of evaluation of the Montessori system we may observe that the central feature of her method is the *'Didactic Apparatus'* designed to enable the normal children to develop their powers and capacities by means of a self-educative process which is called *'auto-education'*, free from adult control, adult intervention, or adult interference. Dr. Montessori maintained that such material could be handled by the little children themselves without any assistance from the Directress, and they could profitably be utilized for purposes of sensory training and for individual occupation. They not only made the children disciplined but gave them immense delight. The following lines written by one of the assistants to Dr. Montessori vividly describe her experience with Montessori school children: "Little children between the ages of three and four would repeat an exercise with an air of concentration and indifference to surrounding distractions, that we have been accustomed to associate only with men of genius. Such a period of *'work'* might continue from a quarter of an hour to an hour, and then the child would seek other work, upon which he would concentrate in a similar way. Moreover, the child did not seem tired, as after an enforced effort, but rather refreshed and tranquillized. Indeed, disorderly children—those of a type likely at any moment to lapse into some form of indiscipline—invariably acquired inward stability, once they had entered upon this form of spontaneous work. The teacher in the second and subsequent years of the formation of the class had very little to do in the direction of maintaining order."

Madame Montessori was indeed perfectly right like Rousseau and Froebel in regarding child nature as pure, simple and unsophisticated and hence she laid stress on the natural and spontaneous development of the child in 'wholesome and regulated surroundings'. But a great mistake did she commit in not realizing that "education is itself life and that the activities of real life can be utilized in training children".

There are some other limitations of this system, such as, the neglect of the emotional development of children and her apathy for the training of their imagination as already pointed out. The knowledge of the 3R's is also imparted too early in life. Moreover, the training of senses in isolation is not psychologically sound, and according to some, sense training itself has a 'dubious value'. Another point of criticism urged against this system is that it is based on the long discarded Faculty Psychology.

The Montessori method was first introduced in the United States of America in 1911, but as Graves says, "American interest in it waned as rapidly as it had begun." Just as Dewey in his long lifetime suffered some 'misinterpretation' at the hands of some of his earnest disciples, so also was the fate of Dr. Montessori. Besides, her doctrine advocating free and unhampered development on the part of children was 'interpreted as a threat to authoritarian government' and aroused their suspicion. In the year 1935, the German Montessori Society was banned by the political police, and in 1936, 'all official Montessori schemes in Italy were abolished by decree'. But all this misfortune could not break her heart, as she was a 'person of great determination, vigour and driving power'. This is evident from the fact that although she was exiled from her own country in the old age, yet she went on working incessantly and steadily, issuing personal directions and advice to her followers in far off countries like India, America, Britain, the Netherlands, etc.

Both the merits and shortcomings of Dr. Montessori's method have been brought out in the following extract from Luella Cole: "The Montessori system has, then, its virtues and its faults. * * * * * Mme. Montessori's outstanding virtues are her sturdy independence, her insistence upon being herself, her willingness to let other people be themselves, her devotion to science, her deep love of learning, and her intuitive understanding of children. Her shortcomings are her overintellectualized interests, her dogmatized science, and her lack of provisions for the emotions."

We must, however, remember that Dr. Montessori is a pioneer of reformation and she has preached her gospel of *freedom.* It is for the later educationists to devise means for the realization of her ideals. Miss Helen Parkhurst in her Dalton Laboratory Plan has worked in the pioneer's line and has suited her method to the requirements of advanced students. The Play-way in education and the Project Method are also built on the same foundation and can profitably be applied by the intelligent teacher for the advancement of his pupils to certain branches of study. Dr. Montessori has experimented with tiny children and has enlightened us with her experiences in regard to the methods that can be usefully applied for their education. But we have her *gospel of freedom* which is capable of being extended to all stages of student life. In conclusion, we must say that on account of her eminent contributions to child education Dr. Montessori will be considered as one of the outstanding teachers of the world.

PART TWO

Indian

CHAPTER 10

Tagore, the Herald of the National Ideal in Education (1861-1941)

RABINDRANATH Tagore was born in May, 1861, of a highly cultured family in Calcutta, noted for its generosity, fine literary taste and love of all things that are beautiful. The Tagore family played a leading role in the social and cultural life of the times. Most of the members of this family have been great thinkers, writers, poets, musicians, painters, and the like. Rabindranath's father was Maharshi Devendranath Tagore, the leader of the *Adi Brahmo Samaj.* His grandfather Dwarkanath Tagore was known as a highly cultured and successful man of business, who had twice visited England, where he was called *Prince Dwarkanath.* Rabindranath was the youngest son of his father. He lost his mother when he was only fourteen years old.

The spirit of Devendranath 'marked a reaction in the development of the family character, in as much as he showed from his early childhood a deep predilection in favour of the inner world of ideals and saintly aspirations'.

And so in his later life he selected and purchased a lonely spot of land at Bolpur for his life of meditation and communion with God. This secluded place finally became the poet's *Santiniketan,* literally, 'the abode of peace', with which Rabindranath's name is identified.

Rabindranath's school education was sporadic and fragmentary, because in his very early years he developed a dislike for the atmosphere of the *traditional* schools and, in fact, was in revolt against *formal schooling.* He attended in succession Oriental Seminary, Normal School, and Bengal Academy but none of these schools could interest the boy. When he had grown a bit older, he was sent to St. Xavier's School, Calcutta, but even there the result was no better. About his reminiscence of St. Xavier's Rabindranath writes, "We had half-an-hour for writing our copy-books; that was a time when, pen in hand, I used to become absent-minded and my thoughts wandered hither and thither." Later on he left this school. The poet did never go to college or university for taking a degree or diploma. But his home education with private tutors under the vigilant care and direct supervision of his father and the elders of his family was perfectly sound. Rabindranath later wrote in his *'Reminiscences'* that his programme of studies was rigidly planned by his third brother, Hemendranath, who liked him to be educated in *diverse* subjects. Rabindranath's father also wanted his son to have a strong body, a good brain, a kind heart and a pure mind. "Consequently, the poet had to read a lot more than was required in his school curriculum." Quite early in life he was taught at home Indian

Philosophy and Religion, Sanskrit, History, Mathematics, Physics, Biology, Physiology, Anatomy, etc. in addition to English and Bengali Language and Literature. By nature and temperament the young boy loved *beauty, music,* and *poetry.* It is said that he began to compose fine verses when he was only eight years old. His first poem was published in the *Tattvabodhini Patrika,* a *Brahmo* periodical organized by his father. From his very early life, the young poet also developed a habit of brooding deeply over the social, political, educational, moral and religious problems of the times.

Devendranath Tagore, poet's father, had very often to be away from Calcutta on business, and hence young Rabindranath was left mostly to the care of the family servants who were all 'strict' persons. They would not allow him to move about as he liked. It is said that one of the servants used to draw a circle on the ground and would compel the boy to stay inside it and not beyond! Rabindranath, with his 'fine sensibility, innate love of *freedom,* and his wonderful capacity of transforming everything into words of beauty' revolted against the dull and dreary routine and lifeless teaching of the stereotyped schools. To quote his words, "I do not know if I learnt anything there but I do remember the kind of punishment that was meted out to offending boys." He said elsewhere, "As soon as I entered the classroom, the benches and tables forced themselves rudely on my attention, elbowing and jostling their way into my mind. They were always the same—stiff, cramping and dead. * * * * * We had to sit like dead specimens of some museum whilst lessons were pelted at us from on high like hailstones on flowers."

All this experience of his boyhood days contributed a great deal to the building up of his philosophy of life and of education. When Rabindranath grew up, he recollected his own unhappy school life. This made him start an institution where children could learn freely and live in the lap of Nature and in harmony with Nature. He felt that "our childhood should be given its full measure of life's draught, for which it has an endless thirst. The young mind should be saturated with the idea that it has been born in a human world which is in harmony with the world around it". This was the dream of his life.

In 1877 Rabindranath was sent to England to study Law. But he was not interested in legal studies also. During his stay in England, however, he studied English literature and came into personal contact with learned professors and thereby enriched his experience. Thus we find that most of his education was derived from firsthand contact with Nature, men, and things—the *three* kinds of teachers, as pointed out by Rousseau in *the Emile.*

On coming back to India, he seriously devoted himself to studies and started writing poems, dramas, novels, essays, short stories, etc. and contributing to various magazines and journals, and publishing books. In the year 1901, when he was nearing forty, he started a school of his own, *Brahmacharya Vidyalaya* ('Asrama School') only with *ten* boys at *Santiniketan, Bolpur*—that secluded sanctuary already referred to. Here he began his new life and new experiment as *Teacher Rabindranath.*

In 1909, Tagore's world-famous *Gitanjali* ('Song Offerings') was published, the English version of which won for the poet the Nobel Prize for Literature in 1913. The renowned Irish poet, W. B. Yeats spoke very highly of the intrinsic merits and beauty of this 'literary work of supreme culture' by Tagore. Simultaneously, tributes of honour and admiration from various quarters of the globe were showered upon the poet. In 1915, Knighthood was conferred on him by the British Government. But the poet renounced the title in 1919 as a protest against the Amritsar Massacre, otherwise known as *Jalianwalabag Tragedy*. The Universities of Calcutta and Oxford honoured Tagore (or, rather honoured themselves) by awarding him the Honorary Degrees of Doctor of Literature. He then travelled widely over the world, visiting various Asiatic and European countries, the United States of America, etc., and everywhere he was given the warmest and most enthusiastic reception.

In the year 1921, the *Visva-Bharati* was established, the motto of which, as conceived by Tagore, is: *'Yatra visvam bhavatyekanidam'*—'where the whole world nestles together'. The poet's vision was to found an International University, seeking to develop understanding between Eastern and Western ways of life and culture,—where the East and the West may meet in common fellowship. In 1951, by a University Act, the Government of India recognized the *Visa-Bharati* as a Central University, empowered to hold examinations and award degrees and diplomas. For full forty years the poet ceaselessly and indefatigably worked at *Santiniketan,* communicating to the world his gospel of love of mankind, emphasizing the spiritual affinity between man and man, and holding out to the universe his ideals of *harmony* and *beauty* in human life. Tagore's creative urge was so powerful and dynamic that it yielded him no respite, physical or mental, till the day of his passing away on the seventh of August, 1941.

"How dull it is to pause, to make an end,
To rust unburnish'd, not to shine in use!
As tho' to breathe were life."

In the words of Professor Radhakrishnan, "Rabindranath Tagore was undoubtedly the greatest leader of the Indian Renaissance, and his influence was felt in all sides of our cultural life. Education did not escape it." Rabindranath was as great a *teacher* as he was a *poet*. A possessor of an outstanding genius and of a rare sensitive soul, Rabindranath has perhaps more than any other great poet of any other country surveyed almost all fields of human knowledge and activities, and left everywhere the sure impress of his original thought and the sweep of his brilliant and fruitful intellect. J. L. Dees in the *Souvenir* 'Tagore and America', has rightly observed thus: "Tagore was not alone a poet. The brilliant, impatient mind which rebelled at *formal schooling* after the age of twelve found, to be sure, the greatest outlet for its protest and for its love of Man, Nature and God in poetry. Yet its owner was also novelist, dramatist, essayist, historian, philosopher, singer, actor, painter, and educator. His passionate and prolific pen introduced a renaissance in Bengali literature, provided the model for a whole school of Indian writers, and served as a catalyst of cultural and national consciousness in the critical period of India's re-emergence. His *Santiniketan* school, later extended to include his *Visva-Bharati* (World Culture) University, at Bolpur in West Bengal, has become a symbol of tolerance and universalism in education and, in its development over more than half a century, has had a positive influence on Indian thinking."

The poet was an integrated personality. "His philosophy of life, his poetry, educational ideology, his social sense and political consciousness,—all the facets of his personality were interrelated and brought each other into relief."

Tagore's educational ideals form a part and parcel of his philosophy of life. Hence in order to understand his educational theories and doctrines we must have an insight into his philosophy of life. Tagore was an upholder of the *Upanishadic* philosophy which maintains that the entire universe is pervaded by one and the same self-conscious Spirit, the Supreme All-Powerful Being that manifests Himself in and through the kingdom of Man and Nature. *'Ekamevadwitiyam'* (There is One God and no second). *'Sarvam khalvidam Brahma'* (All are the manifestations of the One Absolute Being). With this belief Tagore perceived unity in plurality, uniformity in the midst of diversity. It was his conviction that a divine spark is ingrained not only in the very nature of man but in everything in the universe. This belief induced him to love and respect every creature of God, however small or insignificant it may be. "The feeling of separatedness, of being different, is an illusion caused by ignorance." And this feeling alone leads to *'conflict'*. Real wisdom makes man realize the *oneness* or *interconnectedness* in the universe. This supreme knowledge can be achieved through *'love'* and it 'culminates in freedom and joy (*ananda*)'. This is the real basis of Tagore's *naturalism, humanism,* and *internationalism,* on which, again, is based his philosophy of education. Tagore's philosophy reminds us of Friedrich Froebel who also maintained that 'there is *one* law of unity or interconnectedness in the whole universe of Man, Nature, and God.' Froebel said in his *'Education of Man'*, "In all things there lives and reigns an eternal law. All things live, move, and have their being in and through God, the divine unity."

Tagore was virtually an *individualist* who believed in the right and freedom of the individual 'to shape his life in his own way'. But his individualism was not egoistic; it was 'basically *Indian* in conception'. As we have already mentioned, Tagore was a believer in the creed of the *Vedantic* philosophy, and as such, he realized the fundamental unity amidst God, Man and Nature. He believed that there is a spiritual bond which knits together all human beings into communion with God. Hence come his love of mankind, love of Nature, universal brotherhood, international understanding, internationalism in education, and so on.

Just as Nature-study is the central subject in Froebel's *Kindergarten,* so also *Nature* occupies an important role in Tagore's philosophy of life and of education. The poet felt that "man must realize his kinship with Nature as he must realize Nature's kinship with human beings". He believed that our first work is to bring the child mind in contact with Nature which is *living*. He regretted that the traditional education 'has taken us away from our natural surroundings and has weaned us from Nature and its vitalizing and life-giving influences'. He said, "We rob the child of his earth to teach him Geography, of language to teach him Grammar. His hunger is for the Epic, but he is supplied with chronicles of facts and dates. He was born in the human world but is banished into the world of living gramophones."

Like Froebel, Tagore realized the value of Play and stressed the importance of Playway in the early education of children, because Play was regarded by him as a free and spontaneous expression of creative activity, growth and joy. He said:

"On the sea-shore of endless
world children meet,
They build their houses with
sand and they play with
empty shells."

Again, in his curriculum, handicraft was accorded a very important place as in the *Kindergarten,* because handwork, according to him, provides ample opportunity for creative self-expression and affords aesthetic pleasure and artistic delight.

So we see that there are various points of agreement between Froebel and Tagore in respect of their philosophies and theories of education. "Not only in theory but in their educational practice also both have insisted with equal fervour on *joyous living* and *creative activities.*"

As regards the *aim* of education, Tagore says that "the highest education is that which does not merely give us information but makes our life in harmony with all existence". To quote Sunilchandra Sarkar, formerly *Adhyaksha,* Vinaya Bhavana, Visva-Bharati, "Education, according to Tagore, is the all-round growth and development of the individual in harmony with the Universal, the Supreme Person who has in himself the various levels or planes of consciousness and experience corresponding to man's physical self, life, mind and soul." Tagore observes, "In my institution I try to make provision for these *three* aspects of freedom—freedom of mind, freedom of heart and freedom of will. * * * * * I believe that the object of education is the freedom of mind which can only be achieved through the path of freedom—though freedom has its risk and responsibility as life itself has. * * * * * Perfect freedom lies in the perfect harmony of relationship which we realize in this world—not through our response to it through *knowing* but in *being*." The poet sings:

"Where the mind is without fear and the head
is held high;
Where knowledge is free;
Where the world has not been broken up
into fragments by narrow domestic walls:

* * * * *

Into that heaven of freedom, my father
let my country awake."

—From the *Gitanjali* ('Song Offerings')

Thus, Education, to Tagore, has its only meaning and object in freedom—'freedom from ignorance about the laws of the universe, and freedom from passion and prejudice in our communication with the human world.' *'Sa vidya ya vimuktaye.'*

Education is the national concern of a people and it engaged the attention of the poet from the very beginning. From the very first his sensitive mind was pained at the vast illiteracy of his countrymen and the apathy and indifference of the alien Government and even some of the educated people of our country to it. From the very outset Tagore realized that the type of education that the British people had introduced in India was insufficient to meet the actual needs and demands of the vast population of this country; only a wealthy and privileged section of the people could benefit by it, while the rest wallowed in complete ignorance. In a brilliant essay Rabindranath refers to this sad state of affairs. Before the English came, he states in course of his essay, the conditions were different and much better. The educational system was much better organized, and illiteracy on such a large scale was unknown. Adam's Reports bear an eloquent testimony to this fact. There existed more than one lac of primary schools (*Pathshalas*) in Bengal alone, besides which there were numerous other elementary schools founded and maintained by rich merchants and *zemindars* of every important village, at their own cost. Education, at least elementary education, was within the easy reach of every villager, and the number of literate persons was much greater than it is now. What a sad commentary on British rule! Besides, Tagore, in this essay, refers to various methods of popular education which were in vogue during those days. There were, for example, various kinds of religious and social festivals and functions like *jatra, kathakata, kavi-gan, kirtan, Baul,* and so on, all of which were intended to instruct and educate the people through recreation. Today we find that our National Government have been devising elaborate schemes and plans for the wide diffusion of mass elementary education, adult literacy and social education among the people of our country. But Tagore points out that there existed in our country a far better and a more efficient system of imparting adult education in pre-British days.

Rabindranath has employed his masterful intellect and powerful pen to point out the defects and drawbacks of the prevailing system of education. One grave defect inherent in the system of education to which he has continually pointed his finger was the 'medium of English'—a foreign language to us Indians. In the same essay to which reference has already been made, he states that in education, mother tongue is like mother's milk and so long as we are kept deprived of this life-giving and energizing substance and are *bottle-fed* from another's mother-tongue, our education is bound to be lop-sided, the intellectual growth of our boys and girls must be stunted and the vast illiteracy of the country can never be liquidated. In this connection, the poet cites the example of Japan and the Japanese who have imbibed all that is best in western culture and civilization within the short period of fifty years. This miracle could be accomplished, adds

Tagore, because they used their *mother tongue* in effecting this process of *westernization* without imposing upon the nation the burden and weight of a foreign tongue.

The kind of education we had been receiving then was, according to Tagore, not only insufficient but soulless and mechanical. "All these years we have tried to adorn the cage, but the parrot within has been allowed to starve." Tagore spoke of the existing system as being an *"education-factory,* lifeless, colourless, dissociated from the context of the universe, within the bare white walls staring like eyeballs of the dead". He said elsewhere, "Children have their active subconscious mind which, like the tree, has the power to gather food from the surrounding atmosphere. For them the atmosphere is a great deal more important than rules and methods, buildings and appliances, class teaching and text-books." Education was wholly imposed from outside. But true education must be a growth from within and not an imposition or accretion from without. The prevalent system of education, he opined, was unrelated to both our individual and national needs. The crowning purpose of education is to promote the full and free development of our inherent faculties and aptitudes, and to make us strong individuals, self-reliant and independent men and women, assets to the family, to the community, to the country at large and the nation to which we belong. The English system of education was futile in this that it had accomplished none of these aims and objectives.

But it would be a mistake to conclude from this that Rabindranath wanted us to reject western education and western culture altogether. Far from it. What he wanted us to do and what he himself did was to eliminate its objectionable features and to imbibe and assimilate what is best in it—the cream and real substance, and to co-ordinate it with what is best in our own indigenous system of education, which had much to contribute to world culture. Tagore proclaimed that in those grim days of antiquity when most parts of the globe were enveloped in the utter gloom of ignorance, India was much enlightened and acted as the torch-bearer of culture and civilization to the rest of the world. The poet sang:

"Thine the skies where dawned the
first bright morn,
The heritage thine, where the earliest
Sammans were sung,
Thine, too, the forests where first
went forth sublime,
Knowledge, Religion—store of
Lore Divine."

In the *Santiniketan* and *Sriniketan* institutions Rabindranath wanted to 'reorient' our ancient Indian ideals to modern conditions. It is this *synthesis,* this marriage or spiritual mingling of the flowers of both oriental and occidental culture that has been his chief aim, and this, to a great extent, formed the nucleus of the School and the University—*Santiniketan* and the *Visva-Bharati.*

The foregoing remarks make it clear how Rabindranath by his vigorous and penetrating criticism of the prevailing educational system has contributed to educational thought and largely the educational reforms that we see taking place today. It may be pointed out in this connection that the mother-tongue as the medium of secondary education, which the University of Calcutta and thereafter the West Bengal Board of Secondary Education had accepted, was mainly due to the poet's zeal and vehement criticism that he had continually urged against the unreal, unpractical and mechanical system which condemned our tender boys and girls to learn everything through the medium of a foreign language. The Post-Graduate Department of Bengali of the University of Calcutta, the greatest achievement of Sir Asutosh, would not have been what it is today but for Rabindranath, for is it not he who made of the under-nourished and neglected instrument of the Bengali language, a rich, expressive and forceful organ, throbbing with new music and melody and pulsating with fresh life? It it not he who raised the status of the Bengali language from an obscure and unknown position to world-recognition? It was said of Sir Asutosh:

> "His noblest achievement, surest of all—
> The place for his mother-tongue in
> step-mother's hall."[1]

For the last few years the question of adopting Bengali as the medium of instruction in higher education was raised at different times before the Academic Council and the Senate of the University of Calcutta and was debated. It is a happy sign of the times that the decision to adopt Bengali as the medium of instruction and examination in both Under-graduate (including Honours courses) and Post-graduate stages, has finally been accepted by Calcutta University and this regulation will be given effect to from the years 1974 and 1975 in Part I and Part II, B.A., B.Sc., and B.Com. examinations respectively, and from the years 1976 and 1977 in Part I and Part II, M.A., M.Sc., and M.Com. examinations respectively.

---

[1] These lines were inscribed on the marble bust of Sir Asutosh erected in the Darbhanga Building of the University of Calcutta.

But the most notable, solid and practical contribution of Tagore to education has been his foundation of the School and the University, as already mentioned. He felt that education had become artificial, 'being divorced from the stream of life and confined within the four walls of the class-room'. Thus being cut off from social contexts, it had greatly lost its value. He said, "Education is a permanent part of the adventure of life, ... it is not like a painful hospital treatment for curing them (students) of the congenital malady of their ignorance, but is a function of health, the natural expression of their mind's vitality." So he started the School which is situated amidst rural surroundings in a solitary place, where the teachers and the taught can wholeheartedly pursue their studies undisturbed by the *din and bustle, the noise and temptation* of city life. Education in such surroundings aims at training not merely our *intellect* but also our *emotions.* This school embodies in it all the educational ideas and ideals of the poet which, as has already been pointed out. are based on a correlation and co-ordination of what is best in our own indigenous system of education and in that of the West.

Tagore once wrote, "The greatest teachers in ancient India whose names are still remembered were forest dwellers." He had, therefore, a great charm and fascination for 'the message of the forest'. The old *Asrama* ideal was 'the bed-rock of his educational institutions'. The system of education which Rabindranath introduced at *Santiniketan* School is primarily based on the old *Brahmanic* ideal of education. The *Asrama* life which the students of ancient India had to live, in a holy atmosphere, observing the vow of *Brahmacharya,* doing their own work and cooking their own food, taught them valuable lessons in *self-help, self-reliance* and *self-discipline* and made them strong in body, mind, and character. This ideal appealed to Rabindranath, and this way of life of the students of ancient India he incorporated partly in his system. At *Santiniketan* the pupils study and play in the picturesque scenes and delightful sights of Nature. Here Tagore introduced open-air classes and double-shift systems in the programme of work, fit for the tropical climate like ours. What is most striking about this institution is the sweet and cordial relationship that exists between the teachers and the taught, and which is so useful for education. The curriculum here is broad-based and includes instruction in language, literature, science, music, dancing, painting, sculpture, crafts and various other useful subjects that are taught by the most efficient teachers. Here, therefore, is full scope for the development of individual tastes and aptitudes of the students.

As regards the equipment and preparation of teachers. Tagore stressed the idea that a teacher can only be a good teacher who remains a *student* all his life and takes his sacred duties seriously. He said, "A most important truth which we are apt to forget is that a teacher can never truly teach unless he is still *learning* himself. A lamp can never light another lamp unless it continues to burn its own flame. The teacher who has come to the end of his subject, who has no living traffic with his knowledge but merely repeats his lessons to his students, can only load their minds; he cannot quicken them." Rabindranath said elsewhere, "We learnt one great truth regarding education. We came to know that man could learn only from man. A tank can be filled with water, a flame can be started only from another flame, and a life can be enlivened by another life."

In Tagore's opinion, the importance of close contact between the teacher and the taught can hardly be overestimated. It goes a long way in developing a spirit of good discipline among the students. "It is the teacher that makes the school," goes the saying. The qualities of a good teacher, such as love, affection, sympathy, etc., can brighten the entire atmosphere of the school. Full of knowledge and virtues the teacher is like the flame lighting others—he is the high reservoir, as it were, wherefrom matters of knowledge and spirit easily flow down and fill up the minds of the pupils. The sense of indispensability of love and sympathy in an ideal teacher is emphasized by Rabindranath in the following words: "Teachers should be the ideal comrades of those whom they teach, and through the course of teaching, their minds should be stirred up in sympathy with the stirrings of the young minds." We have already noticed that the need for teacher's genial behaviour and warm dealings with pupils was also stressed by Pestalozzi, who maintained that the relation between the teacher and the taught should be based upon and ruled by *love*.

In the *Santiniketan* school, a spirit of freedom, of willingness to help one anoher, dominates the entire atmosphere. There is healthy and cheerful cooperation between the students and the teachers. The traditional concept of discipline, based on fear of punishment, on restrictions and prohibitions, is unknown here. Every care is taken to foster the growth of *individuality* as is apparent from the variety of subjects already mentioned, such as poetry, fine arts, physical education, etc., included in the curriculum and taught to the students who show a marked taste for them.

Sense-training for the young children was also emphasized here. The poet himself would take classes in Sense Training with little children, and in such classes, on every occasion, 'he would invent and introduce many surprisingly new activities and experiments'. Tagore's observations in this connection are as follows: "Children with the freshness of their *senses* come directly to the intimacy of this world. This is the first great gift they have. They must accept it naked and simple and must never again lose their power of immediate communication with it." Tagore believed that the senses are of great value to a human being and as such they stand in need of proper training and development. Any defect or weakness in the functioning of the senses renders contact with Nature or the environment 'less perfect than it should be', and it would handicap the owner. The graver the defect, the greater the chances of *'isolation and loss'*. In the poet's opinion, the capacity for enjoying music depends, to a great extent, on the training of the ear. Similarly, proper appreciation of art or enjoyment of beauty in the scenes and sights of Nature or grace in pieces of sculpture, architecture, etc., depends solely on the training of the eye to perceive the different shades of light and colour, similarity and contrast, and so on. Hence Tagore held that training of the senses in the early years is highly valuable to every child, and it is indispensable, especially, to those whose sense-organs are markedly below the average or whose capacity for sensory discrimination is not normal. William Blake, the famous painter, poet and mystic, while allegorically describing the different sense-organs of the human being ascribed religious colour to them and sought to bring out their spiritual meaning and significance. His beautiful lines are worth quoting here:

"Five windows light the cavern'd Man:
    through one he breathes the air ;
Through one hears music of the spheres ;
    through one the Eternal Vine
Flourishes, that he may receive the
    grapes ; through one can look,
And see small portions of the eternal
    World that ever groweth ;
Through one himself pass out what time
    he please, but he will not:
For stolen joys are sweet, and bread
    eaten in secret pleasant."

The *social sense* is also allowed to develop to a great degree, this being largely aided by the corporate life the students have to live there. Tagore also stressed the need and importance of *social service* 'not only for social uplift but also for the *spiritual uplift* of the individual, which is the result of such service'. Besides, here in *Santiniketan* by being trained to perform their own task, to dress neatly, to keep clean, to arrange their articles in proper order, in being regular and punctual, the students not only learn valuable lessons in order and discipline, culture and manners that stand them in good stead in their later lives, but they also cultivate the habit of living beautifully and tastefully and moving about gracefully. Music, poetry, art and craft, etc., which are compulsory subjects, do much to enrich, to beautify and to *harmonize* the life of a student. To quote Professor Radhakrishnan again, "The purpose of education is to provide a coherent picture of the universe and an integrated way of life. We must obtain through it a sense of perspective, a synoptic vision, a *samanvaya* (harmony) of the different items of knowledge". If, at the present time the world suffers from a wave of vulgarity and barbarism, it is because our whole culture is lop-sided. Our intellects are well-trained but the needs to which our intellectual gifts are to be harnessed happen to be ignoble. Hence is the present impasse. If we are to work for a saner and juster world order, those who belong to it will have to become *new*. And this *newness* of life will have to be achieved only through education. It was Tagore's ambition through his educational institutions to train us for a world community which will transcend the bounds and restrictions of races, and the obligations and limitations of nations. Gurdial Mallik (*Visva-Bharati*) has beautifully expressed the *Santiniketan* ideal in the following words: "What is *Santiniketan* but an experiment in the synthetic education of the instincts and intuitions, as these are expressed in the activities of the hand, the head and the heart? In other words, it is an attempt at enabling the individual to integrate his personality into a whole through a harmony of work and worship—work with the muscles of the body as well as mind and worship of the Beautiful in Truth and in Love and in Nature with the ecstacy and intimations of the heart."

It is to be noted in this connection that Tagore's philosophy of education is a curious blend of both idealism and realism. That the poet was a *realist* in education is evident from the fact of his *Sriniketan* ideal, his establishment of the Institute of Rural Reconstruction, the Rural Farm, the *Siksha Satra,* etc. He observed, "... our education should be in full touch with our complete life, economic, intellectual, aesthetic, social and spiritual, and our educational institutions should be in the very heart of our society. * * * * * For, true education is to realise, at every step, how our training and knowledge have organic connections with our surrounding. * * * * * Our centre of culture should not only be the centre of the intellectual life of India, but the centre of her *economic* life also, It must cultivate land, breed cattle, to feed itself and its students, it must produce all necessaries, devising the best means and using the best materials, calling *science* to its aid."

Hence, Sunilchandra Sarkar (*Visva-Bharati*) rightly spoke of Rabindranath's traits as *teacher* when he said, "The ideal educator must combine in himself the gifts of a philosopher, a poet, a mystic, a social reformer, a scientist and a veritable man of action."

Now, a few more words about the poet's *Visva-Bharati*. This, as we have said before, is an international centre of learning and research, which germinated in Tagore's mind as an institution 'where the world makes its home in a single nest'. Here scholars and learned persons from different countries come, stay and study. In this respect it resembles the University of *Nalanda* of old. The value and importance of the *Visva-Bharati* as a centre of international culture, learning and research cannot be overemphasized. Firstly, through it, India is once again playing the role which she had once played successfully, that of radiating knowledge and wisdom to the world. Secondly, attracted by the very splendour of Tagore's genius some of the master minds of other countries have been drawn to the *Visva-Bharati* and they are making valuable contributions in thought, knowledge and organization to the institution. So the *Visva-Bharati* is today what *Nalanda* was in the ancient days—the cultural centre of India—serving as a connecting link between India and world-civilization.

The aims and objects of the Visva-Bharati, as conceived by Tagore, are (*i*) to study *the mind of man* in its realization of different aspects of truth from diverse points of view ; (*ii*) to bring into more intimate relation with one another through patient study and research, the different cultures of the East on the basis of their underlying unity; (*iii*) to approach the West from the standpoint of such a unity of the life and thought of Asia; and (*iv*) to seek to realize in a common fellowship of study the meeting of the East and the West, and thus ultimately to strengthen the fundamental conditions of world peace through the establishment of free communication of ideas between the two hemispheres. Tagore said, "Visva-Bharati represents India where she has her wealth of mind which is for all. Visva-Bharati acknowledges India's obligation to offer to others the hospitality of her best culture and India's right to accept from others their best."

Although it is not intended to discuss here the merits of Rabindranath as a poet and literateur, yet one writing on his contributions to education cannot conclude without mentioning, however briefly, the wonderful literature he has created and the educational value of it. While reading them one cannot help feeling that had Rabindranath done nothing else except composing his beautiful poems and his brilliant prose, he would have still remained an outstanding figure in the educational history of Bengal and for that matter, India and the world. His poems, especially, those in the *Gitanjali,* the book that conquered for him the literary world, contain in them thoughts and ideas which are of immense educational value. Enshrined in this book are poems and imaginings which, for their elevated tone, for the nobility and grandeur of expressions, for the loftiness of thoughts, win our hearts at once and give us courage and a spirit of calm resignation to the will of God when we are tossed to and fro in the midst of storm and stress of life and cannot see our way clearly through the world. For, the eternal theme of the book is the *Almighty Father,* the Creator of this beautiful and awe-inspiring world, at whose feet our heads bow down in reverence, resignation and devotion. We emerge from reading these poems, more chastened and elevated and purified and sublimated in spirit. The educational value of the *Gitanjali* is established beyond dispute.

That Rabindranath would in future be a *teacher*—one of the greatest teachers of the world, could be foretold from a study of the *make-believe* plays of his childhood. In his little interesting book '*My Boyhood Days*' the poet writes, to our curiosity and amusement, that in his boyhood he would sometimes play the role of a school-master having the railings of the verandah as his pupils. He would occasionally give lessons to these pupils. Rabindranath observes, "* * * * * there were days when I assumed the role of teacher, and the railings of the verandah were my pupils. They were all afraid of me, and would cower before me in silence. Some of them were very naughty, and cared absolutely nothing for their books. I told them with dire threats that when they grew up, they would be fit for nothing but casual labour. They bore the marks of my beatings from head to foot, yet they did not stop being naughty." To quote Nirmalchandra Chatterji (*Visva-Bharati*), "Call it a dramatic irony if you like, some thirty years later, on one bright sunny day in the winter of the year 1901 he brought together a few boys among the warm shadows of the *sal* trees at the *Santiniketan* sanctuary founded by his father and once more assumed the role of a teacher, or 'guru', to use the happier Indian word."

Rabindranath had also keenly felt the absence of proper text-books for children and he has produced several text-books, too, for our primary and secondary schools. All these are quite psychologically prepared. The poet wrote a text-book on elementary science which, for its novel and simple way of presenting abstruse and difficult scientific facts in lucid, clear and beautiful prose, will ever remain one of the standard books on the subject. He has also written books on Prosody (*chhanda*). The poet's *Kamala Lectures* which he delivered at the University of Calcutta and the Convocation Address (*Samavartana Bhasana*) in Bengali in the year 1936 to the same University are remarkable for originality of thoughts and ideas and elegance of style and language.

Now, by way of evaluation of Tagore's educational theories and practices it may be observed in the words of Anathnath Basu that "the cardinal principles of his educational philosophy are: (*i*) freedom, (*ii*) creative self-expression, and (*iii*) active communion with Nature and Man. The genesis of the ideal of freedom lies in his own experience as a child, and his experience of the present system of education." Tagore's thinking was rooted in ancient Indian culture and it was nourished by the thought currents of the *scientific humanism* of the West.

The world knows that Rabindranath made most magnificent contribution to Bengali language and literature, but at the same time his contribution to the educational thought and reform of our country, as has been seen from the foregoing discussions, is no less vast and immense. The *Visva-Bharati,* the poet's greatest achievement, will ever stand as a monument to his glorious ideal of education which he wanted to uphold and preach before mankind. In the booklet, '*Tagore Visits The United States*', published by the United States Information Service, New Delhi, on the occasion of Tagore Centenary, the following beautiful lines occur: "Poet, painter, playwright, author, educator and ambassador of enlightenment, Tagore embodies the idea of the universal man, and his infiuence is found wherever any one may read a book, see a play, enjoy music, view a painting, or converse in freedom on man and his place in the universe. ***** Poet, philosopher and humanitarian, he symbolizes the culture and highest learning of India, but by his dedication to the quest for truth and the development of man, Tagore transcends geographic boundaries and belongs to the world."

While speaking of the greatness of Rabindranath, Professor Humayun Kabir observed, "The world rightly honours Rabindranath Tagore as one of the greatest literary figures in history. His writings include more than thousand poems and two thousand songs in addition to a large number of short stories, novels, dramatic works and essays on diverse topics. As a writer of lyrics and songs, he has rarely been equalled and perhaps never surpassed. As a short story writer, his rank is among the first three or four masters of the craft. As a novelist and playwright, he has achieved for himself an honoured place in the world of letters. He was a musician of the highest order and he not only composed songs but set them to music. He took to painting when he was about 70 and yet produced within ten years almost 3000 pictures. He made notable contributions to religious and educational thought, to politics and social reforms, to moral regeneration and economic reconstruction of India and the world. The educational ideas which inspired his school at *Santiniketan* have deeply influenced all modern educational thought in India. Steeped in the age-old traditions of the East, an inheritor of the rich cultural heritage of ancient and mediaeval India, he was simultaneously a modernist who welcomed the values proclaimed by the West. In a word, Tagore lived and worked for the realization of the ideal of Universal Man."

A few years ago the *Rabindra Bharati* (University) was established in the residential house of the Tagore family in Calcutta, in order to commemorate the hallowed memory of the poet. The special feature of this University consists in its imparting post-graduate education in Music (vocal and instrumental), Dance, Drama, and various other kinds of Fine Arts, in addition to other Arts subjects like English and Bengali language and literature, Philosophy, Sanskrit, History, etc. This University has already been famed far and wide for its valuable contribution, and we are sure, it will render commendable services to shape our *Modern Bharat* by producing alumni of the highest efficiency and imbued with lofty idealism, and will thus radiate Rabindranath's name to all future generations of mankind.

CHAPTER 11

Swami Vivekananda, the Prophet of the Humanitarian Ideal in Education (1863-1902)

NARENDRANATH Dutta, who later became known and renowned as Swami Vivekananda, was born in Calcutta in January, 1863. His father Viswanath Dutta was a successful attorney-at-law of the High Court of Calcutta. Naren was the eldest son of his father. His mother was a devout stately lady of the old school, 'with little formal education but an astonishingly good memory'. Her life and example exerted a sublime influence on the early training and character formation of her son. Naren's grandfather Durgacharan, since his very boyhood, 'longed for a *monastic* life', and in fact, after the birth of a child be became a *monk,* left his family and his fortune, and disappeared. Naren, too, at a very tender age contracted a peculiar fascination for 'wandering monks', many of whom would come to his house. It is also said that when he was only four or five years old, he used to buy from the market clay images of gods and goddesses and would calmly sit down before them with his eyes closed, as if in the posture of meditation. Young Naren had an irresistible urge and a deep yearning for *spiritual enlightenment* which afterwards drew him to the 'unlettered saint' of Dakshineswar, the famed spiritual leader and mystic, Sri Ramakrishna Paramahansa, as a result of contact with whom Narendranath eventually emerged as Vivekananda.

Narendranath was educated in English schools and colleges under the careful guidance of his father; and quite early in life he mastered the Hindu classics under the tutelage of his mother. From his very childhood he was by nature and temperament energetic, inquisitive, restless, and 'aggressively independent but cheerful, never sullen'. He was a great lover of music and could sing and play many kinds of musical instruments. He was adept in games and sports and enjoyed wrestling, boxing, swimming and riding horseback.

Narendranath's memory was even more prodigious than his mother's. He could get by heart the contents of a whole school textbook by going through it only once. As a student, he displayed most striking intelligence; and with maturity 'this intelligence became predominantly analytical and critical'. He was a voracious reader, and history was his favourite subject. He loved reading Wordsworth and Shelley. He studied western philosophy, western logic, European history, etc., at the age of sixteen or seventeen. He read John Stuart Mill and Herbert Spencer, and as a result, leaned towards 'agnosticism' and 'scepticism' for the time being, which state, of course, did not last long.

When Narendranath was a student of the General

Assembly's Institution (now Scottish Churches College), its Principal was Rev. W. W. Hastie, an Englishman, who was a sincere lover and admirer of Indian culture and tradition, and who was also loved by many Indians whom he came in contact with. The Principal cherished a high opinion about Naren's intellectual calibre and academic attainments. Once he remarked, "Narendranath is really a genius. I have never yet come across a lad of his talents and possibilities, even in German universities amongst philosophical students. He is bound to make his mark in life." In the words of Christopher Isherwood, "Hastie also had the distinction of being one of the very few non-Indians who had met Ramakrishna. One day, in a literature class, Naren heard him lecturing on Wordsworth's *'The Excursion'* and the poet's nature-mysticism. This led the Professor to speak of those states of deep meditation in which outer consciousness is lost. He told his students that such states were only possible as the result of purity and concentration and that they had anyway become extremely rare in modern times. 'I have known only one person who has achieved such meditation, and that is Ramakrishna of Dakshineswar. You will understand it better if you visit this saint'."

In the meantime Naren had become a 'doubter' so far as his quest for divine communion and 'seeing God' was concerned. But his doubt, like that of Descartes, was for *'construction'*. He had already joined the *Adi Brahmo Samaj* where he met Maharshi Devendranath Tagore, the leader of the *Samaj*. Devendranath could not satisfy the boy's spiritual thirst and divine longing. Naren was disappointed. Now, on the advice of Rev. Hastie he decided to meet Sri Ramakrishna. The episode of his meeting with the saint is interesting. Narendranath was invited to sing in a social party to entertain some guests, one of whom happened to be our Ramakrishna. At the very first sight of the appearance of the boy, Sri Ramakrishna was simply charmed and took a keen interest in him, whom he intuitively considered to be one of his 'destined disciples'. He invited the boy to see him at Dakshineswar. Accordingly Narendranath met Sri Ramakrishna Paramahansa. In the words of Swami Tejasananda, "The meeting of the two master-minds that were almost poles asunder in points of education and culture, was not an accident but was a Providential dispensation. Imbued with the scientific culture of the West, Narendranath stood as a mighty challenge before the naked Fakir of Dakshineswar, who symbolised in his towering personality all that constituted the greatness of the East. The challenge of Narendranath was boldly accepted and squarely met by the God-intoxicated saint, and the former had eventually to bend his proud head before the feet of this spiritual giant and accept him as his *Guru*. As a matter of fact, the union of these two great spiritual personalities was typical of the meeting of the two streams of thought coming from two opposite directions and forming into a huge confluence."

Since his first meeting with the saint and his initiation into a new way of life in 1881, Narendranath's doubts and misgivings were all gone, and his mind became 'pacified'. He turned out to be the most devoted disciple of Sri Ramakrishna and resolved to propagate the latter's message, 'the service of humanity' to the world. Now Narendranath became *Vivekananda*. After the *Mahasamadhi* of Ramakrishna in the year 1886, Vivekananda rallied all the young disciples of his departed Master and founded the illustrious and world-famed *'Ramakrishna Order'* with the object of preaching to mankind the great spiritual ideal and cultural heritage of India (*philosophy of the Vedanta*) as well as Sri Ramakrishna's mystic spiritual experience, and having for his motto of life the uplift of the masses, particularly the toiling, starving, down-trodden and neglected people of the motherland. He himself became the 'soul and leader' of this Mission or Movement.

From this time onward Swamiji devoted the rest of the brief span of his life to wandering over the length and breadth of India from the Himalayas down to the Cape Comorin, seeking a solution of the country's spiritual problems. He used to say, "Something has possessed me and is giving me no rest." To quote Swami Tejasananda again, "Verily, it was the spirit of the Master that took possession of him and forced him into whirlwind of unceasing activity for the benefit of mankind." Vivekananda also travelled over Eastern Asia, Europe and the United States of America, communicating his universal message of unity and tolerance. The impact of his forceful oratory, logical arguments, convincing power and above all, his dynamic personality was extraordinarily overwhelming. In 1893, when he was only thirty, Vivekananda participated in the Parliament of Religions, held at Chicago in the United States and delivered his memorable 'Chicago Address'. John T. Reid in a brochure *'Bridges of*

Understanding', observes, "In these days of rapid communication, it is difficult for us to realize how venturesome he (the Swami) was to undertake to travel some 10,000 miles by slow boat to an unknown land. His plan was twofold: to gain support in America for his plans to regenerate India's millions, and to open the eyes of the West to the values of Vedanta philosophy. * * * * * There he proved to be one of the most notable figures in the assembly. The universality of his message captivated his huge audiences, and after the Parliament of Religions had adjourned, Swami Vivekananda spent the next two years in America, travelling far and wide, lecturing, impressing the crowds with his message of love and history of India. This son of India was responsible for a renewed and widespread American interest in the spirit and problems of India. Vedanta centres in most major American cities hold his name in reverence."

Up to his last days Swami Vivekananda 'strove for the reconciliation of *human contrasts and conflicts*'. He emphasized that the brotherhood of man demands both social well-being and spiritual regeneration. Swamiji was in perfect agreement with the views expressed by Wordsworth in the following famous lines:

> "If this belief from heaven be sent,
> If such be Nature's holy plan,
> Have I not reason to lament
> What man has made of man ?"

—From '*Lines Written In Early Spring*'.

Swami Vivekananda undertook a great pilgrimage from *Badarikashrama* to *Kanya Kumarika* (Cape Comorin). After having completed his pilgrimage in the year 1892 he sat on a rock near the temple of the *Mother Kumari* and deeply meditated on the results of his tour and also on the future regeneration of India. In order to commemorate this sacred event a magnificent temple has been constructed on this *rock* at Cape Comorin, called after the name of Swamiji as *Vivekananda Shila* (Rock). In September, 1970, we witnessed the Consecration Ceremony of this Rock and the Temple, performed with great solemnity and perfect sanctity. The monument has been consecrated by Shrimat Swami Vireswarananda Maharaj, the President of the Ramakrishna Math and Mission, and dedicated to the nation by Shri V. V. Giri, the President of the Indian Union.

Swami Vivekananda passed away in the year 1902 only at the age of thirtynine.

Speaking of Swamiji, Rabindranath remarked, "If you want to know India, study Vivekananda. In him everything is positive and nothing negative." Vivekananda embodied in himself manifold aspects of Indian life, culture and tradition. He was not merely a preacher who interpreted Eastern religion and spiritualism to the West but was at the same time a great social reformer, an eminent philosopher-educator, and above all, a world-renowned prophet of humanitarianism. There is no sphere of India's social and cultural life which Vivekananda did not set his hands upon, in one way or the other and sought to bring about reforms in that area. Our main concern in this chapter is to study him as an educational philosopher.

We shall, therefore, pass on to consider in brief Swami Vivekananda's contribution to education. As with other great educators, Vivekananda's educational philosophy follows as a corollary from his philosophy of life. It has already been stated that he was deeply imbued with the teachings of the Vedanta, which emphasize the idea of the *oneness* or *interconnectedness* in the universe. He believed that God is Infinite Existence, Infinite Knowledge and Infinite Bliss (*Sat, Chit, Ananda*). Just like Rabindranath and Froebel, Vivekananda also upheld the '*Law of Unity*' of all existence. He remarked, "As the one fire entering into the universe expresses itself in various forms, even so, that One Soul is expressing itself in every soul and yet is infinitely more besides." Vivekananda's educational ideas virtually follow from his 'philosophy of man'. Man, according to him, is potentially infinite and perfect, and divinity is ingrained in the very nature of man. "God made man in His own image", so says the Bible. John Caird puts it, "In the very notion of man as a spiritual, self-conscious being there is already involved a *potential or virtual infinitude*." A higher nature of man is revealed in his spiritual characteristics. He has the power to 'transcend the bounds of his narrow individuality to find himself in that which seems to lie beyond him'. "There is that in man which forces him to rise above what is material and finite and to find rest nowhere short of the Infinite All-comprehending Mind." This religious spark is original and universal, and this demand for the Infinite is no less urgent upon him than his hungering for food and thirsting for drink. Hence Vivekananda said, "Religion is the manifestation of divinity *already in man*. . . . . . Each soul is potentially divine. The goal is to manifest this divinity within by work or worship, or psychic control or philosophy, by one or more or all of these, and be free. This is the whole of religion. Doctrines or dogmas, or rituals or books, or temples or forms are but secondary details."

Almost in a similar language Swamiji defines education thus: "Education is the manifestation of the perfection *already in man*. Knowledge is inherent in man, no knowledge comes from outside; it is all inside. What we say a man knows should, in strict psychological language, be what he 'discovers' or 'unveils'. What a man *learns* is really what he 'discovers' by taking the cover off his soul which is a mine of infinite knowledge."

Thus we find that Vivekananda's definition of education perfectly accords with the etymological or derivative meaning of the term *'education'*. Education, as we know, is derived from Latin *educere,* which means 'to lead out'. The word may also be taken to have come from another Latin term *educare,* meaning 'to foster', 'to bring up', 'to rear' or 'to raise'. The etymological meaning of 'education', therefore, is 'leading out' or 'drawing out' or 'eliciting' the traits and capacities that are innate or inherent or *already there* in the minds of the educands. In other words, the potentialities of an individual and his manysided interests and abilities are brought forth into actualities by means of the task of education. This *manysidedness* of an individual, according to Swamiji, is the foundation of his character, which leads to '*total manhood*'. And the greater the totality, the more expanded and harmonious it is, the greater is the perfection. Vivekananda also said that 'the training by which the current and expression of will are brought under control and become fruitful, is called *education*'.

Socrates and Plato also had almost similar conceptions about 'education' when they held that education is *not* something instilled or thrust into the mind from the external world. They both took education to be a '*growth from within*' or '*self-growth*'. Socrates remarked that when a child comes to a teacher for education, he does not come with a mind absolutely void or blank—a *tabula rasa,* but on the contrary, he comes 'with a mind already stocked with experiences, observations, ideas, and a fund of common knowledge'. Plato, in defining 'education' said that education consists in 'turning the whole soul round, in order that the eye of the soul or reason may be directed to the right quarter'. By the phrases 'turning the soul' or 'directing the eye of the soul or reason', Plato really emphasizes the spiritual as well as psychological aspect of education. Our *Guru pronam mantra* (the incantation for obeisance or salutation to our Preceptor) also conveys practically the same idea: '*Ajnana timirandhasya jnananjana shalakaya chakshurunmilitam yena tasmai sri gurave namah*' (It is our Preceptor or *Acharya* who, by means of a 'stick to use collyrium' as it were, helps us to open or disclose the eye of knowledge which is blinded as a result of ignorance —*avidya*). It implies that the power of sight (or, rather 'insight') is already there but it cannot function only owing to lack of spiritual knowledge. It is our spiritual teacher or *Guru* who comes to our rescue. Plato also said that education does not generate or infuse a *new* principle, it only *guides* or *directs* a principle *already in existence.* Nature, according to him, is more important than nurture, and it is the function of education to provide nurture for *innate* human nature. All this means that the educator should not only have in view what sort of person he wants the child to become in later life but he must also consider what kind of person the child *is, here and now.* The Vedanta teaches us that 'within man is all knowledge—even in a child it is so' and it requires only an *'awakening'* and this much is the function of the teacher. The teacher is only to assist the educands to learn how to apply their own intellect to the proper use of their hands, legs, ears, eyes, etc., and finally everything becomes easy.

We shall see later on that both Gandhi and Sri Aurobindo advocated exactly the same views regarding the concept of education. Gandhi remarked, "By education I mean an all-round *drawing out* of the best in child and man—body, mind and spirit. Real education consists in drawing the best out of yourself." According to Sri Aurobindo, "The first principle of true teaching is that nothing can be taught. The teacher is not an instructor or task-master, he is a *helper* and a *guide.* His business is only to suggest and not to impose. The chief aim of education should be to help the growing soul to *draw out* that in itself which is best and make it perfect for a noble use." Pestalozzi and Froebel, too, as we have seen, held almost similar ideas as to the nature and purpose of education. Pestalozzi observed, "All the pure and beneficent powers of humanity are neither the products of art nor the results of chance. They are really a *natural possession* of every man. If we desire to aid the poor man, the very lowest among the people, this can be done in one way only, that is, by changing his schools into true places of education, in which the moral, intellectual and physical powers which God has put into our nature may be drawn out." Froebel also said, "By education, then, the divine essence of man should be unfolded, brought out, lifted into consciousness, and man himself raised into free conscious obedience to the divine principle that lives in him and to a free representation of this principle in his life." All these conceptions are similar, and we need not multiply examples.

Vivekananda says further, "All knowledge that the world has ever received comes from the mind; the infinite library of the universe is in your mind. The external world is only the suggestion, the occasion which sets you to study your own mind. All knowledge, therefore, secular or spiritual, is in the human mind. Like fire in a piece of flint, knowledge exists in the mind, suggestion is the friction which brings it out. All knowledge and all power are *within*."

As regards the aim of education, Swamiji does not attach much importance to loading or stuffing the mind with facts or information. He wants man-making, character-building and life-building education. He says, "Education is not the amount of information that is put into your brain and runs riot there, undigested all your life. . . . . . If you have assimilated five ideas and make them your life and character, you have more education than any man who has got by heart a whole library." Rousseau also shared similar view in connection with the early education of *Emile*. He said, "Restrict children to the use of a *few* words, and let these words express real thoughts." Vivekananda humorously remarks, "If education were identical with information, the libraries would be the greatest sages in the world and encyclopaedias the *Rishis*!" He wanted that kind of education by which character is formed, strength of mind is increased, the intellect is expanded and by which we can stand on our own feet. Swamiji emphasized the need for total development of the *whole* man—physical, mental, moral and spiritual, when he said, "What our country now wants are muscles of iron and nerves of steel, gigantic wills which nothing can resist, which can penetrate into the mysteries and secrets of the universe and will accomplish their purpose in any fashion, even if it meant going down to the bottom of the ocean meeting death face to face. It is man-making religion that we want. It is man-making theories that we want. It is man-making education all round, that we want." In respect of upholding the importance of physical education also, the views of Rousseau and Vivekananda are similar. All wickedness, said Rousseau, comes from weakness. In Swamiji's opinion, also, weakness causes various kinds of evils. He held that the human body which is the abode of living God should be kept sound, clean and pure. It is for this reason that he was more in favour of 'playing football' than 'studying the *Gita*'. And this is why he stressed the 'muscles of iron' and 'nerves of steel', inside which dwells a mind of the same material as that of which the thunderbolt is made.

Like Rabindranath, Vivekananda also wanted to revive the ancient Indian ideals of education and culture to serve our modern need. "A singular feature of ancient Indian or Hindu Civilization is that it has been moulded and shaped in the course of its history more by religious than by political, or economic, influences." Religion dominated every sphere of life, and the educational life was no exception. Swamiji said, "Religion is the innermost core of education. I do not mean my own or any one's opinion about religion. Religion is not in doctrines or dogmas, nor in intellectual argumentation. It is being and becoming. It is realisation." Religious and moral education can be imparted through the lives and examples of great saints as well as heroes. Hence Vivekananda was of opinion that the text-books for children should contain stories from the Ramayana, the Mahabharata, and the Upanishads, and the examples of Mahavira, Bhishma, Pratap Singh, Shivaji, and the like should be held out before them. He proclaimed, "Religion and religion alone is the life of India, and when that goes, India will die, in spite of politics, in spite of social reforms, in spite of Kuvera's wealth poured upon the head of every one of her children." According to Vivekananda, religion is the backbone of the national life of India. It is the greatest unifying force, and as such, religious instruction is absolutely necessary for securing integration of national life.

We should remember in this connection that Vivekananda emphasized equally the importance of both secular and sacred (religious) education just as in ancient India knowledge was looked upon as 'one indivisible whole' comprising both *Apara Vidya* (secular knowledge) and *Para Vidya* (supreme or highest knowledge). According to Swamiji, these two kinds of education are not antagonistic to each other but rather complementary. Secular education gives *social efficiency*, while sacred education imparts *psychical* as well as *spiritual efficiency*. Both are necessary, however. Swami Vireswarananda Maharaj observes, "The ultimate aim of education in ancient India was to realise the Self, though the need for secular knowledge was not denied, for it was also necessary for the material needs of the society." He further recommends that if education today is to be a moral force for guiding society, 'then our education must provide a place for *Para Vidya* and a contemplative life in its scheme of studies as in ancient India'.

As regards the method of education, Vivekananda observes that there is only *one* method by which we can attain knowledge, and this method is *'concentration'*. "Concentration of mind", says he, "is the very essence of education. The more the power of concentration, the greater the knowledge that is acquired. The main difference between man and the animals is the difference in their power of concentration. This difference in their power of concentration also constitutes the difference between man and man." Then he mentions that if he had to do his education once again, he would not study facts at all but would develop the power of concentration and detachment and then with a perfect instrument collect facts at will.

Now, the question is: 'How can concentration come'? Swamiji asserts that *Brahmacharya* or complete continence leads to concentration. This develops great intellectual as well as spiritual power. In this connection, he pleads for the transformation of the sexual energy into *spiritual* energy. In his opinion, all learning can be mastered in a short time by observing strict *Brahmacharya*. He remarks, "It is owing to want of continence that everything is on the brink of ruin in our country. The chaste brain has tremendous energy and gigantic will power. Without chastity there can be no spiritual strength. Continence gives wonderful control over mankind."

We are already familiar with a maxim in connection with child education: 'Tell the pupil as little as possible and lead him to tell you as much as possible, from his own observation and deduction'. Swamiji similarly states that the child teaches himself. All education is 'discovery' or rather 'self-discovery'. The teacher is only a director, a helper and a guide. In this respect, Vivekananda is at one with the western educators like Rousseau, Froebel and Montessori. Just like Rousseau and Froebel, he compares education to 'child gardening'. The teacher is a child-gardener. The following beautiful extract from Vivekananda's writings clearly explains the metaphor: "You cannot teach a child any more than you can grow a plant. The plant develops its own nature. The child also teaches itself. But you can help it to go forward in its own way. What you can do is not of a positive nature but negative.

You can take away the obstacles, and knowledge comes out of its own nature. Loosen the soil a little so that it may come out easily. Put a hedge around it; see that it is not killed by anything. You can supply the growing seed with the materials for the making up of its body, bringing to it the earth, the water, the air that it wants. And there your work stops. It will take all that it wants by its own nature. It will assimilate and grow by its own nature. So with the education of the child. A child educates itself." Pestalozzi also said similar things in respect of child education: "Sound education stands before me symbolized by a tree near fertilizing waters. A little seed, which contains the design of the tree, its form and its properties, is placed in the soil. * * * * * In the new-born child are hidden those faculties which are to unfold during life. * * * * * It is not the educator who puts new powers and faculties into man and imparts to him breath and life. He only takes care that no untoward influence shall disturb nature's march of development."

Vivekananda pointed out that the gravest defect of our presentday education is the loss of *Shraddha*. *Shraddha* implies the 'blending of faith and respect', and it also stands for 'self-regarding sentiment'. This is the most essential qualification of a learner. The teacher's duty, as we know, consists in creating strong 'will power' in the pupil. In the words of Mc Dougall, "Will always involves the activity of the self-regarding sentiment." According to Swamiji, *Shraddha* is indispensable not merely for learning or education but for the whole of life. *'Shraddhavan lavate jnanam'* (Faith and respectfulness beget knowledge). This

Shraddha connotes a great deal. It implies respect for parents, elders and superiors, reverence for teachers, devotion to learning, earnestness in all life's pursuits, faith in oneself, and above all, regard for one's own self. The self-regarding sentiment is, therefore, called the 'master sentiment' or 'ruling sentiment'. This regard for one's own self, again, depends on *self-knowledge. 'Atmanam viddhi'* (Know thyself)—goes the maxim. It may be observed in this connection that the present condition of youth unrest is to a great extent due to the lack of this *Shraddha.* Vivekananda said, "The idea of true *Shraddha* must be brought back once more to us. The faith in our own selves must be reawakened and then only all the problems which face our country will gradually be solved by ourselves."

In order to infuse the spirit of self-confidence and self-reliance among the people, Swamiji said, "We are children of the Almighty, we are sparks of the infinite, divine fire. * * * * * Arise, awake, and stop not till the goal is reached." He laid stress upon self-confidence to arouse hope and aspiration in his fellowmen who had been victims to despair and frustration. He regretted saying, "We have had a negative education all along from our boyhood. We have only learnt that we are nobody. Seldom are we given to understand that great men were born in our country. Nothing positive has been taught to us. We do not even know how to use our hands and feet * * * * * We have learnt only weakness. The loss of *Shraddha* has brought in all evils among us and is bringing in more and more."

Regarding 'discipline', Vivekananda believed that if liberty and self-expression through a number of educative activities are allowed to educands, they will automatically be disciplined. It should be the duty of the teacher to foster in the student patience, perseverance, love, faith, submission, obedience, respectfulness, etc. With the help of these finer qualities and virtues the educand will also realize what true religion is.

Swami Vivekananda said, "My idea of education is *Gurugriha-vasa* (living with the teacher)." It can never be denied that the influence of the personal life of the teacher is great. According to Swamiji, the function of the teacher consists in the transference of something 'real and appreciable' and not a mere stimulation of the intellectual or other faculties in the taught. Hence the teacher should be unselfish, sinless, should have knowledge of the true spirit of scripture and should not have hankering after name, fame, or wealth. His task of teaching must be based on *love*—love for the pupils, love for mankind, and above all, love for his *own profession.* Swamiji puts it, "The teacher must throw his whole force into the tendency of the taught. Without real sympathy we can never teach well. The true teacher is he who can immediately come down to the level of the student, and transfer his soul to the student's soul and see through and understand through his mind. Such a teacher can really teach and none else." Vivekananda maintained that the conditions necessary for the pupils are purity, a real thirst for knowledge, and perseverance. 'Purity in thought, speech and act is absolutely necessary.'

Swami Vivekananda believed that new India will arise of the huts of the fishermen, the cobblers and the sweepers'. out of the 'cottage of the peasant grasping the plough, out He was greatly pained at heart at the appalling poverty of the masses. As a philanthropist and a humanitarian he deeply sympathized with the sunken millions of of India. The only remedy for improving their sad lot was, according to him, spread of education among them. He said, "No amount of politics would be of any avail until the masses of India are once more well-educated, well-fed and well-cared for. * * * * * So long as the millions live in hunger and ignorance, I hold every man a traitor who, having been educated at their expense, pays not the least heed to them."

The service of humanity, as we have already stated, was the motto of his life and the first duty of his religion. Swamiji remarked, "The poor, the low, the sinner in India have no friends, no help; they cannot rise, try however they may. They have forgotten that they, too, are men, and the result is slavery. * * * * * Let each one of us pray day and night for the down-trodden millions of India, who are held fast by poverty, priest-craft, and tyranny—pray, day and night for them. I care more to preach religion to them than to the high and the rich. I am no metaphysician, no philosopher, nay, no saint. But I am poor, I love the poor. Let the people be your God—think for them, work for them, pray for them incessantly."

Vivekananda suggested that the masses should be taught in *vernaculars*. He wanted to give them ideas so that they might get information. But, in his opinion, something more was necessary, and that is—*culture*. Until we give them that, there can be no permanence in the raised condition of the masses. In the words of Romain Rolland, "The cause of the people is the cause of the intellectuals. The division between the caste of the intellectuals and the world of workers is fatal, for it helps the perpetration of the rule of *reaction*."

As regards the medium of instruction, Vivekananda recommended that the mother tongue should be accepted as the medium of education for the masses of the people in India, English for the cultivation of the Western sciences and technology, and Sanskrit for a proper understanding of the cultural heritage of India.

Swamiji was of opinion that women should receive education based on strict religious principles. He observed, "The women of India must grow and develop in the footprints of Sita, and that is the only way. Sita is unique. There she always will be, this glorious Sita, purer than purity itself, all patience and all suffering. She who suffered that life of suffering without murmur, she the ever-chaste and ever-pure, she the idol of the people, our national god she must always remain." The broad outline of the curricula for women's education, as prescribed by Swami Vivekananda and developed further by Sister Nivedita, is given below. The subjects for their study are: "Religion, History, Puranas, Sanskrit, Bengali and English languages, Mathematics, Science, Domestic Science including house-keeping and the duties of home life, sewing and culinary arts, upbringing of children, physical training, service to animals and the poor, and vocational training." We thus find that the list is quite exhaustive and psychologically devised; and it is our belief that it will be acceptable to any modern educationist.

Vivekananda, who was mainly a philosopher, a patriot and a humanist, focussed his attention on the varied problems of our national life. He realized that *education* is the panacea of all ills. In him, therefore, we find a transition—the transition of a prophet to an educator. Swami Ranganathananda has put it, "In the transformation of Swami Vivekananda from a self-absorbed saint to a compassionate *teacher* is contained the story of modern India's spiritual and cultural regeneration." Vivekananda had the firm conviction that any kind of reform, social, political, moral or religious can be achieved only through a sound system of education. Hence he became transformed into an *educationist*. And it was the peculiarity of the character of this prophet-patriot to combine both *spiritualism* and *humanitarianism* in a balanced form. Although the *summum bonum* of his life was God-realization, he never neglected the humanitarian service. He said, "To see Shiva, the Lord, in *man* is the best form of religion." This love of man in Swamiji 'welled out of his Vedantic convictions'. Till the last day of his life Vivekananda 'maintained a perfect balance between a burning love for God and the service of suffering humanity'. He was in this respect like Wordsworth's Skylark—

> "Type of the wise, who soar but never roam,
> True to the kindred points of heaven and home."

Swami Vivekananda never wrote a treatise on Education as such. The 'gems and pearls' of his educational ideals and views have come to us not in a process of continuous and systematic planning but in fragments through his numerous talks, lectures, discourses and discussions in India, Europe and America. His doctrines and theories of education can be gleaned only through random harvest. To assimilate these principles of education it is necessary to probe into the treatises he wrote on social, moral and spiritual subjects. Vivekananda was not a teacher or educator in the strict or restricted sense of the term, but the depth of his realization of the meaning, significance and importance of education made him a *philosopher-educator*. And it is curious to find that Vivekananda's philosophy of education is no less organized, well-knit, coherent and systematic than that of any other great educators described in this book. Gandhiji once on a visit to the Belur Math on the occasion of a birthday celebration of Swami Vivekananda, observed, "I have come here to pay my homage and respect to the revered memory of Swami Vivekananda whose birthday is being celebrated today. I have gone through his works very thoroughly, and after having gone through them, the love that I had for my country became a thousand-fold. I ask you, young men, not to go away empty-handed without imbibing something of the spirit of the place where Swami Vivekananda lived and died."

The following extract from the works of Swamiji depicts his views on an ideal system of education in a nutshell: "With *our* education has to be combined modern Western sciences. Both these are necessary. What we want are Western science coupled with *Vedanta, Brahmacharya* as the guiding motto and also *Shraddha* and faith in one's own self; to study, independent of foreign control, different branches of the knowledge that is our own, and with it the English language and Western science; we need technical education, and all else which may develop the industries, so that men instead of seeking for service, may earn enough to provide for themselves, and save something against a rainy day." Pandit Jawaharlal Nehru remarked, "Rooted in the past and full of pride in India's heritage, Vivekananda was yet modern in his approach to life's problems, and was a kind of bridge between the past of India and her present."

"Thou hadst a voice whose sound was like the sea,
Pure as the naked heavens, majestic, free."

Swami Nikhilananda of the Ramakrishna-Vivekananda Centre, New York City, U.S.A., while paying a tribute to the memory of 'Swami Vivekananda: Prophet of New India', observed: "Swami Vivekananda is a unique phenomenon in our time. A philosopher, a mystic, a man of action, a devotee of God, a dynamic speaker, a poet, a dreamer, a patriot, and a lover of humanity, he had a sweep of mind which is beyond our comprehension."

The Ramakrishna Mission, a non-political and purely spiritual and humanitarian institution founded by Swami Vivekananda, which has for its aim the realization of the founder's ideal of selfless humanitarian service in a spirit of renunciation, will ever stand as a monument to the sacred memory of this glorious son of India.

CHAPTER 12

Gandhi, the Progenitor of the Wardha Scheme of Basic Education (1869-1948)

MOHANDAS Karamchand Gandhi, who later became known as Mahatma Gandhi or Gandhiji, was born in October, 1869 at Porbandar in Kathiawar (Gujrat), a small State in the north-western part of India. His father was Kaba Gandhi who, though not highly educated, was respected by everybody because of the qualities of his head and heart. He rose to be the Prime Minister (*Diwan*) of the State of Rajkot. His grandfather was also a Prime Minister. Mohandas's mother was a devout woman of saintly nature, who exerted a great influence on the life and character of her son. Romain Rolland observes, "His parents were followers of the Jain school of Hinduism, which regards *ahimsa,* the doctrine of non-injury to any form of life, as one of its basic principles. This was the doctrine which Gandhi was to proclaim victoriously throughout the world. The Jainists believe that the principle of *love* is the road which leads to God." The *Ramayana* was regularly read in Gandhi's family.

Mohandas was sent to school when he was seven years old. He was a shy boy and did not like to mix with other boys in the school. He passed the Matriculation examination in 1887, at the age of eighteen and was then sent to England for studying Law. After finishing legal studies he returned to India in 1891 and began his practice as a barrister in Bombay High Court. But he was not any striking success at the bar. There was awaiting him a greater and nobler task—'the huge task of political liberation of the country', for which he was destined.

In the year 1893, Gandhi was offered a chance, which he took, to go to South Africa. He sailed for Durban to help an Indian firm there in a big law case. He never thought that he would have to stay in Africa for more than twenty years. There he found that the Indians and the coloured people of Asia were greatly suffering under bitter social injustice, 'all because of the pigment of their skin'. They were being inhumanly treated and extremely humiliated. Gandhi himself was no less a victim to disgrace, insult and even physical assaults. To quote Dr. M. Aram, "He decided it should be resisted and rectified but since he was a religious person, he could not think of adopting violent or destructive methods. So he discovered and developed novel method of non-violent resistance—resistance without hatred for the opponent, resistance which results in reconciliation and friendship." Thus it was in South Africa where Gandhiji's political feelings were first awakened and enabled him to evolve and perfect the 'spiritual weapon of Non-violence' (*ahimsa*) and 'Truth', otherwise called *Satyagraha*, which literally means 'holding on to truth' or 'steadfast adherence to truth'. Gandhiji strictly adhered to Truth throughout his life. He once said, "I may be a despicable person, but when Truth speaks through me, I am invincible."

In 1894, he founded the Natal Indian Congress with a view to starting a movement of non-violent resistance against the barbarous treatment towards the coloured people. In the year 1903, Gandhiji shifted to Transvaal where he conducted some educational experiments at Tolstoy Farm. Tolstoy Farm had some special features. It was an educational institution organized in the nature of the family, of which Gandhiji was the head. Here he taught his own sons along with other children. They were mainly trained in vocational subjects and were taught co-operative living, self-help, self-confidence, dignity of labour, etc. Besides these, some academic subjects were, of course, included in the curriculum. Physical development of the pupils was aided by manual work and character formation was stressed through the life and example of the teacher. This organization on the whole aimed at securing an all-round development of the children studying here. The experience of teaching in this institution practically served as the groundwork of Gandhiji's later formulation of the *Wardha Scheme of Basic Education.*

He returned to India in 1915 and paid a visit to *Santiniketan* of poet Tagore. He stayed there only for a short time and then founded his *Asrama* at Sabarmati. Here he whole-heartedly devoted himself to training and educating the inmates of the *Asrama* in truth-speaking, non-violence (*ahimsa*), untouchability, pious living, and so on. After twenty years he established another *Asrama* in 1935 at Sevagram, Wardha. This is the place where Gandhiji propounded his famous scheme of *Basic Education* and gave it a final shape as a result of the All India National Education Conference held at Wardha in 1937 under his own Chairmanship. We thus find that Gandhiji's *Nai Talim* or 'New Education' (of which Basic Education is a stage) is the outcome of his educational experiments and experiences at these three places, namely. Tolstoy Farm, Sabarmati Asrama and Sevagram Asrama.

Mahatma Gandhi met a *martyr's* death while addressing his usual Prayer Meeting on January 30, 1948. The whole world was plunged into deep grief at this shocking news. Upon Gandhiji's martyrdom, Prime Minister Jawaharlal Nehru said, "The light has gone out of our lives,—there is darkness everywhere." But on the next moment. correcting himself, Nehru continued: "I was wrong. For, the light that shone in this country was no ordinary light. The light that has illumined this country for these many years will illumine this country for many more years ; and a thousand years later, that light will be seen in this country, and the world will see it and it will give solace to innumerable hearts. For, that light represented something more than the immediate present: it represented the living truth . . . . . the eternal truths, reminding us of the right path, drawing us from error, taking this ancient country to freedom." Haridas T. Mazumdar in a book '*Mahatma Gandhi : Peaceful Revolutionary*' writes, "The spirit of India's Gandhi as well as of America's Lincoln is today sorely needed by a generation madly dancing over a precipice. We have learned to fathom the secrets of the atom, we have learned to master nature, but we have not yet learned to master our inner selves. Our scientists can predict with accuracy the long-range behaviour and movements of stars and planets millions of miles away—but we are unable to foretell our nextdoor neighbour's behaviour and movements the very next moment."

The age of Gandhi was remarkable in the history of India. It was an age of international political upheaval, and high waves of nationalism dashed against every shore. To maintain the spirit of India, an urgency was felt for evolving a truly national system of education. *Poetry, prophetism* and *politics* were principally the three different spheres of activities of the three great personalities—Tagore, Vivekananda and Gandhi respectively. Hence it is but natural that there may be some differences in the educational schemes and doctrines propounded by them. But the difference is not great. Tagore was virtually a poet and an internationalist and he felt that nationalism without a universal outlook is meaningless and a 'menace to civilization'. To him, life without a consciousness of divine spirit, and activity without a sense of beauty are burdensome and irksome. Hence in Tagore's *Santiniketan* and *Sriniketan* all his genius and resources were invested and there was the transformation of a poet into a teacher. Vivekananda was mainly a prophet and a humanist who, as we have already remarked, concentrated all his energy to bringing about social and spiritual regeneration and eventually realized that this can only be achieved through *education*. So, in him we find a transition from a prophet to an educationist. Gandhi was chiefly a politician and a social reformer. To him, political freedom carries no meaning without economic emancipation which, again, is unthinkable without a national system of education. Hence it is no wonder that Gandhiji underwent a transition from non-cooperation to the *'spinning wheel'* and thence to Basic Education.

Let us now consider Gandhiji's philosophy of education and his contribution to educational theory and practice. To understand this, it will be necessary, at the outset, to understand his philosophy of life. Because, to him, as also to Tagore and Vivekananda, was education an abiding and inseparable part of the great adventure of life. The most important characteristic of Gandhian philosophy of education is that the educational schemes that he formulated and the objectives that he held out before us have germinated from his own life experiences. "A noteworthy feature of the doctrines of the great educators who are also great philosophers, is the emergence, and reflection, of their philosophical views in their educational schemes or in the educational systems of their times", so says Rusk. That is to say, all educational questions are ultimately questions of philosophy. Every educational system, as we have noted hitherto, draws its sustenance from the philosophy which guides its practices. Behind Basic education, too, there is a philosophy—a way of life. Gandhiji's *'Nai Talim'* is then a 'way of life', which is designed to revolutionize society and to reform and regenerate it.

The metaphysic that inspired Gandhi's view of life and *which is also the mainspring of Basic education* is that he believed in the '*transcendental nature*' of the human spirit. To him, there is no religion higher than 'truth' (*Satyannasti paro dharmah*). Gandhian philosophy is impregnated with the spirit of Ramakrishna and Vivekananda. It is deeply spiritual, resting upon *two* fundamentals —'truth' and 'non-violence' (*ahimsa*), as we have stated before. According to him, God is the Ultimate Truth. He is not only Truth, He is Life, Light and Love. In his opinion, truth is the *summum bonum* or the goal of life, while *ahimsa* (non-violence) is the means of attaining this goal. He said, "*Ahimsa* and Truth are so intertwined that it is practically impossible to disentangle and separate them. They are the two sides of a coin . . . . . Nevertheless *Ahimsa* is the means, Truth is the end . . . . . so *Ahimsa* is our supreme Duty."

Just like Tagore, Vivekananda and Froebel, Gandhiji believed in the unity of Godhead and maintained that the One Absolute Being pervades the entire universe, who holds all together, creates, dissolves and recreates. As a corollary to this belief, it follows that Gandhiji, like Tagore and Vivekananda, believed also in the unity of mankind. "I believe in the essential unity of man, and for that matter, of all that lives", said he. He also observed, " . . . . . what though we have different bodies? We have but '*one soul*'. The rays of the sun are many through refraction. But they have the *same source*." Service to man, in Gandhi's opinion, is 'service unto God' and hence a means for realizing Truth or God. It is to be noted in this connection that in respect of service to humanity, Gandhi is in perfect agreement with the views of Vivekananda. Just as with

Comenius, the ultimate end of man is eternal happiness with God, so also with Gandhiji "man's ultimate aim is the realization of God, and all his activities, social, political and religious, have to be guided by the ultimate aim of the vision of God. The immediate service of all human beings becomes a necessary part of the endeavour, simply because the only way to find God is to see Him in His creation and be one with it. This can only be done by service of all. I am a part and parcel of the whole, and I cannot find Him apart from the rest of humanity." This signifies that man is nothing but a reflection or revelation of God; and hence all are equal in the eyes of God.

Gandhian philosophy is a *dynamic* concept—it is a 'synthesis of *karma* (action) and *jnana* (knowledge), self-realization through *karma-yoga* and self-illumination through *jnana-yoga.*' The purpose of life, according to Gandhi, consists in the attainment of divine wisdom through a self-controlled and self-active life of action, as laid down in the *Upanishads* and the *Gita*: *cf.*,—

"All who worship what is *not real* knowledge enter into the blind darkness: those who delight in real knowledge without action, enter, as it were, into greater darkness" (*Ishopanishad,* ix). "But he who knows at the same time both knowledge and action overcomes death and attains immortality" [*Ibid*].

Gandhiji was of opinion that the soul of man has special significance for him, and in its fullest manifestation lies the fulfilment of life. If man is to attain life's fulfilment, he has to rebuild the society in which he must live and work in a manner conducive to this end. Complete freedom of the individual is fundamental to the conception of such a society. Hence Gandhiji wanted to establish a society based on freedom, justice, equality, love, peace, *ahimsa,* universal brotherhood, and so on. He remarked, "The ultimate objective of *New Education* is not only a balanced and harmonious individual but also a balanced *society.*" Individual development and social development should go together. In the words of I. B. Verma, "Individuals make society and society shapes individuals. Any sound philosophy of education should, therefore, reconcile the claims of the individual and society. On the surface, the education of the man and that of the citizen appear to be mutually exclusive, but, in depth, they are not only inclusive but identical. Gandhiji's educational thought, being the product of his philosophy, shows the way of achieving this identity of the individual and society." The individual, therefore, is not to be taken as a 'mind in isolation' but as 'a living unit under the influence of social milieu'. So, one of the objectives of education, as defined by Gandhiji, consists in turning out not only good individuals but also *socially useful citizens.* To Gandhiji, education is the means of 'social control'. In this respect, the views of Gandhiji and John Dewey are exactly similar.

In the brochure *'Basic Education: A Fresh Look',* published by the Department of Basic Education (N.C.E.R.T.), it has been observed: "Indeed Gandhiji's idea of *Nai Talim* or New Education is the first attempt in this country to relate education to social progress, national development, economic development with employment for all, national solidarity and universal brotherhood of mankind—a need which has been strongly emphasized by the Indian Education Commission (1964-66)."

Gandhiji carefully studied the actual condition of the country and the state of education under the yoke of foreign rule. He was very much aggrieved at the huge illiteracy of his countrymen. Moreover, education that was being imparted then, was, according to him, wholly unpractical and created *misfits* in society. It failed 'to stimulate either the growth of personality or the development of a link with reality'. On the whole, education was totally divorced from real life and the actual environment. Besides, it created a big gulf between the so-called educated and the uneducated. Gandhiji thought that the proper remedy for all these evils is a sound and effective system of education and 'a just social order in which there is no unnatural dividing line between the *haves* and the *have-nots,* and everybody is assured of a living wage and the right to freedom'. He said, "The education, as it is prescribed today, is detrimental, conceived in terms of masses. ***** The *acid test* of its usefulness is this: Does it make, as it should, an effective contribution to the production of food and clothing? ***** All education in a country has got to be demonstrably in promotion of the progress of the country in which it is given."

True education should aim at an all-round development of human personality, 'physical, mental, moral, cultural and spiritual'. It should assist an individual to fulfil the varied needs of life, such as, physiological, psychological, sociological, economic, and so on. In July, 1937, Gandhiji wrote in the Harijan: "By education I mean an all-round drawing out of the best in the child and man—body, mind and spirit. Literacy is not the end of education nor even the beginning. It is one of the means whereby man and woman can be educated. Literacy itself is no education. I would, therefore, begin the child's education by teaching it a useful handicraft and enabling it to *produce* from the moment it begins its training."

Like Swami Vivekananda, Gandhiji had an 'absorbing passion for the uplift of the *daridranarayana* (the poor down-trodden millions)' and he was greatly concerned about rural India and her innumerable villages. Hence he remarked, "My plan to impart education through the medium of village handicrafts, like spinning, carding, etc., is thus conceived as the spearhead of a silent *social revolution* fraught with the most far-reaching consequences. It will provide a healthy and moral basis of relationship between the city and the village and thus go a long way towards eradicating some of the worst evils of the present social insecurity and poisoned relationship between the classes. It will check the progressive decay of our villages."

Gandhiji envisaged an Indian society which would be absolutely free from exploitation of one by another, and where all people would willingly perform their allotted *work*. He opined that in such a set-up, *work* would be respected and the dignity of labour would be upheld and raised. With a view to emphasizing the importance of *work* he observed, "The disease of the masses is not want of money so much as want of *work*: Labour is money.

***** It is not even poverty that matters so much as idleness, which was at first enforced owing to lack of work and now has become a habit, that matters. Idleness is the root of all evils and if that root can be destroyed, most of the evils can be remedied." If India is to rise and prosper again, we must create, according to him, a new type of society where each and every man will work. Work, by its nature, will inspire strength, self-initiative, self-confidence and self-respect. Gandhiji said, "The introduction of manual training will serve a double purpose in a poor country like ours. It will pay for the education of our children and teach them an occupation on which they can fall back in after-life, if they choose, for earning living. Such a system must make our children self-reliant. Nothing will demoralize the nation so much as that we should learn to despise labour." Just like John Dewey, Gandhiji wanted the curriculum to consist of activities and experiences rather than 'abstractions and bookish subject-matter'. He said, "What better book can there be than the book of humanity?" According to him, there should be provision for purposeful learning of the children and scope for 'integrated development' of their knowledge, skill, interests, aptitudes, abilities, etc. For this, education should centre round manual and productive work. He maintained that productive activity should be placed at the centre of education for psychological, sociological and economic reasons as already referred to. M. C. Dubey, in a brochure '*Basic Education and The New Social Order*', published some years back by the National Institute of Basic Education (N. C. E. R. T.), has very nicely described what

Basic education is. Some of his beautiful lines are quoted here: "Basic education is the education *of* life, *through* life, and *for* the sake of life. This formula epitomizes all the essentials of the scheme of Basic education. A good life should be the aim of education. A good life is one in which a man develops his individual potentialities and becomes thereby a useful member of the community in which he lives. Individual and social abilities should be developed side by side, so that a perfectly balanced personality may be created. 'Education of life' implies that *life* is the object of education. Education should enable man to be the least dependent on others. Man should cultivate the virtues of self-dependence and co-operativeness to the highest possible degree. ***** Even as a balanced diet contains all the nourishing constituents in desirable quantities, so a balanced personality requires all the desirable traits in right proportion. That is why literacy by itself cannot be identified with education, but is merely one of the means of education." And then the writer epigrammatically observes that Basic education is the education of basis and the basis of education, by pointing out, "Whatever satisfies our basic needs (such as, food, clothing, shelter, clean and healthy living, the cultivation of aesthetic and cultural qualities, etc.) is the medium of our scheme of education. And this is the very basis of our education." Hence, Basic education adopts a five-point programme, including the following items: (*i*) a clean and healthy life, (*ii*) social education and social service, (*iii*) basic crafts and self-dependence, (*iv*) cultural and aesthetic activities, and (*v*) theory and practice of the principles involved therein.

As regards economic self-sufficiency, Gandhiji said that self-support or self-sufficiency is the *acid test* of Basic education. According to him, education ought to be a 'kind of insurance' against unemployment. This reminds us of Rousseau who insisted on *Emile's* learning a trade for earning livelihood. Henry Ford, the great industrialist said, "True education consists in learning to do by doing, learning to help by helping, and learning *to earn by earning.*"

Gandhiji found, to his utter disappointment, that the indigenous crafts and cottage industries of India, its agriculture, its hereditary professions and vocations, which had once been the pride and glory of the country and a matter of wealth to the nation, were utterly neglected. Education was simply bookish, theoretical and wholly unrelated to practical life. Gandhiji observed, "We have up till now concentrated on stuffiing children's minds with all kinds of information, without ever thinking of stimulating and developing them." It could not turn out either useful or efficient citizens or successful men of the world. Vocational and technical education received no attention. Rural education was totally ignored. But, India, as we know, is mainly *a land of villages.*

All these defects and drawbacks Gandhiji wanted to remove by introducing his *Wardha Scheme of Basic Education,* which is 'child-centred', 'life-centred', 'craft-centred' and 'self-sufficient'. In this system of education, one interesting feature is that—all academic subjects like History, Geography, Social Studies, etc., are taught through *'correlation'* with crafts. All subjects must also be correlated with each other. Thus, *'correlation'* is one of the basic principles of Basic education. In addition to the basic crafts, the curriculum of Basic education includes the Mother tongue, Science, Mathematics, General Science, etc. Although Gandhiji, in his original scheme, did not include English in the curriculum, yet it has now found its place here. Because, the function of *Nai Talim* or New Education, according to its progenitor, is not merely to teach an occupation, but through it to develop the *whole man.*

As to Gandhian methodology of education, it may be mentioned that it is almost akin to the Project Method of teaching which, as we know, is based on the principle of acquisition of knowledge and learning in a scientific as well as play spirit, by means of self-initiative, self-discovery, planning, purposefulness, work and experience. It places the educands in the position of explorers or discoverers and not mere passive learners or onlookers.

Another unique contribution of Gandhiji to education is his plea for the introduction of the mother tongue as the medium of instruction. As regards the medium of education he emphatically condemned the foreign medium, saying that it causes '*brain-fag*', puts an undue strain upon the children's nerves, makes them crammers and imitators and renders them wholly unfit for any original work and thought. He puts it, "The foreign medium has made our children practically foreigners in their own land. It is the greatest tragedy of the existing system. The foreign medium has prevented the growth of our vernaculars. If I had the powers of a despot, I would today stop the tuition of our boys and girls through a foreign medium, and require all the teachers and professors on pain of dismissal to introduce the change forthwith. I would not wait for preparation of text-books. They will follow the change. It is an evil that needs a summary remedy." In this respect, Gandhiji was in agreement with Tagore. Had Gandhiji been alive now, none else perhaps would be happier than he himself to see the change. Today a great many of the Indian universities, including the University of Calcutta, have adopted the regional language as the medium of instruction and examination even in their Honours as well as Post-graduate stages.

Gandhiji recommended *three* stages of Basic education, *viz.*, (*i*) Pre-Basic stage, (*ii*) Basic stage, and (*iii*) Post-Basic stage. In the Pre-Basic stage, pupils below the age of 7 are admitted. In the Basic stage, pupils of the age-group of 7-14 are taken. And in the Post-Basic stage, pupils of the age-level of 15-18 are to study and receive more formal type of education. In this connection, we must also note that Gandhi was not opposed to higher education or to imbibing the best elements of foreign culture. He observed: "I do not want my house to be walled in on all sides and my windows to be stuffed. I want the cultures of all lands to be blown about my house as freely as possible. But I refuse to be blown off my feet by any. I would have our young men and women with literary tastes to learn as much of English and other world-languages as they like, and then expect them to give the benefits of their learning to India and to the world like a Bose, a Roy, or the Poet himself."

After 1942, Gandhiji thought of Adult or Social Education as an indispensable part of Basic education. He believed that in order to enlighten the *villages,* the adult population must be educated. Parent education, as we know. is more important than child education.

As regards Gandhiji's views on discipline, it is evident that he was a believer in *self-discipline,* which is based on self-control (*atma-samjam*). This type of discipline is a self-growth or 'growth from within' and not an accretion from without. The principal objectives of education, according to him, are courage (both physical and moral), strength. virtue, good breeding, self-reliance, self-confidence and self-respect. These are to be cultivated, to their fullest extent. in an individual. Gandhiji believed that this kind of individual discipline will naturally lead to *social discipline* on which he laid great stress.

> "Self-reverence, self-knowledge, self-control,
> These three alone lead life to sovereign power."

All this can never be expected from literacy alone.. They can be attained through the example of a superior personality who can inspire the educands. So, in connection with the education of heart, Gandhiji observed, "I do not believe that this can be imparted through books. It can only be done through the *living touch* of the teacher."

This variegated or full-fledged development of individuality, in Gandhi's opinion, leads to the wealth of the society and the State. His following remarks are pertinent: "I would try to develop courage, strength, virtue, and the ability to forget oneself in working towards great aims. This is more important than literacy; academic learning is only a means to this greater end. . . . . . I would feel that if we succeed in building the character of the individual, *society* will take care of itself. I would be quite willing to trust the organization of society to individuals *so developed.* In a nation, where character is developed in all individuals, there can be no conflict between the dictates of one's own conscience and those of the State."

It would not be out of place to make in this connection a brief reference to Gandhi's opinion about 'teachers'. He said that for the successful and effective implementation of the scheme of Basic education, the teachers must be well-equipped and must be imbued with a spirit of high *idealism.* They must be '*artist*' teachers and not mere artisans. They must have adequate philosophy of life and philosophy of education. According to him, an ideal teacher should be full of love, devotion, sympathy, enthusiasm, spirit of sacrifice, patriotism, in addition to abundance of knowledge. The teacher must have sincerity of purpose and must possess social attitudes. Above all, he should love his own *profession.*

Regarding the education of women, Gandhiji felt strongly for their *emancipation* and the right type of education befitting their aptitudes and needs of life. In his opinion, women are better fitted than men for teaching children. In respect of his views on women's education Gandhiji was at one with Plato, who also had great faith in the worth and intellectual calibre of the women folk.

It is really strange that although Basic education has been accepted as a policy of the Central and State Governments since 1946 (about twentysix years ago), yet many of our educated people and even educationists do hardly understand its true principles and implications, and some are almost ignorant about it. Some, again, have misconception about this our *national system* of education, which has been designated as 'the latest gift of the Father of the Nation to the country'.

It would be wrong to think that Basic education is intended only for the rural areas. This is a system of education which must be spread throughout the country, both in cities and villages. An educationist has aptly remarked, "I would go a step further and say that it will not be possible to introduce Basic education successfully in India unless definite steps are immediately taken to start good Basic schools in *urban* areas, particularly in big cities and State headquarters." Otherwise, the village people may have the feeling that their children are being neglected and are being provided with an inferior type of education in the name of Basic schools.

Let us now take up the question: 'What is the fundamental principle of Basic education?' The basic principle underlying Basic education is, as we have said, 'learning through creative and productive work'—it is education through crafts and other activities, and this is no longer a disputed educational principle. This principle has now been accepted all over the world. Even in the most advanced countries of the world, like the U.S.A., the U.K., the U.S.S.R., etc., class-room teaching has given way to various kinds of *activities* in schools; and agriculture, farm-work, gardening, arts and crafts, etc., have been included in their curriculum.

The old idea that good education can be offered only through books has now been discarded and all progressive countries have gradually been realizing that a variety of activities including *work* is essential for the formulation of a sound educational system. This is exactly what Basic education aims at.

In this connection, it would be pertinent to quote a few lines from the remarks of an Arab International Delegation (which had on it also expert educationists of other countries like the United States of America, England and Denmark) that came to India: "It has been the experience all the world over that education through *work* helps to form good character in young men and women."

It must be pointed out in this connection that basic crafts in the urban schools should be different from those of the rural Basic schools. In a booklet entitled *'Basic Education in West Bengal : Guiding Principles'*, it has been stated as follows: "The fundamental principle of learning through creative and productive work, as recommended by the Central Advisory Board of Education, has been accepted by the State Government as the guiding principle of Primary (Basic) Education. It is, however, not proposed to tie the State down to any *single pattern* of Basic school. The form or forms of Basic education, which experience proves to be the most suitable for the requirements of the various areas of the State, should determine the distinctive character of Basic Education to be evolved according to the genius of the people and traditions of handicrafts prevailing. The principle of learning through creative and productive activities would be varied in its character to suit the aptitudes of the children, leading gradually upto a basic craft or crafts suited to local conditions."

Moreover, we must bear in mind that educational considerations should on no account be subordinated to those of production. Production is not the aim of Basic education : it may be the test of its efficient teaching. In all craft work, as in other spheres of activities, children should be taught to strive for the highest possible standard of which at their age they are capable. The entire curriculum and courses of studies, should, as far as possible, be harmonized with this principle. A developing country like India cannot afford to waste funds on educational projects which ultimately yield nothing that could be used by the society. The Standing Committee on Basic Education suggested that all the products of Basic schools should be given for use to the students and should not be credited to the general funds. In any case, students should never have the feeling that they are being made to work for the Government, more or less, like labourers. But, of course, Basic education is education through the *medium* of productive activity. A Basic school does not imply part-time work and part-time education as in the traditional schools. It lays a great amount of emphasis on '*correlated teaching*'. This 'correlated teaching' should be properly integrated with crafts and with the physical and social environment of the school.

From what we have said above, it is clear that Basic education can by no means be regarded as a 'stereotyped, rigid and frozen idea'. Gandhiji wanted to evolve a scheme and method of education through which children could be made active and industrious, happy and cheerful, and could profitably '*learn by doing*'. In this scheme of education we should allow ample opportunities to the teachers for undertaking a variety of experiments in the process of correlating academic subjects with creative and productive activities. Although the basic principles will have to be the same, there should be a certain amount of elasticity in our approach towards this new system of education. If we reduce Basic education to a dogma, creed or ritual, we shall be doing incalculable harm to it and also the greatest disservice to the Gandhian conception of New Education (*Nai Talim*).

Our discussion on Basic education will remain incomplete unless we make a reference to the observations made by the Kothari Commission (Indian Education Commission of 1964-66) in this respect. The Commission has not attached any great importance to the old concept of Basic education but has touched upon '*Work Experience*' (or, manual work) which is the fundamental principle underlying Basic education. But this *work experience*, according to the Commission, should not be centred round 'indigenous crafts' and village employment patterns. It observes, "What is now needed is a *reorientation* of the Basic education programme to the needs of a changing society—that is, a society which needs to be transformed with the help of Science and Technology. In other words, work-experience must be *forward-looking* in keeping with the character of the new social order."

In evaluating Gandhiji's educational ideas and views it may be stated that he rightly advocated the ideal of free, compulsory and universal education for a period of *seven* years. He had in view the ideal of training ideal citizens for the State. His scheme of education, in the words of Hans Raj Bhatia, has certain distinctive merits which are as follows: (*i*) The centre of education is the child: (*ii*) knowledge is considered as one integrated whole; (*iii*) children learn by doing or through self-activity; (*iv*) activity is purposeful and productive; (*v*) education is imparted through some craft work; (*vi*) both teachers and children have greater freedom to work; (*vii*) children acquire a respect for manual labour; (*viii*) both teachers and pupils work for social progress; (*ix*) the ideal of truth and non-violence helps to contribute to world peace.

Again, we know that 'self-expression' is necessary for the balanced development of the child's personality. It is said that 'there can be no impression without the corresponding expression'. And the scheme of Basic education has in it ample provision for *'creative self-expression.'* Basic education contains the elements of *idealism, naturalism* as well as *pragmatism*. Gandhiji was an idealist to the core. He was an idealist first and idealist last. But he wanted to keep his ideals realistic as well as utilitarian and pragmatic. In his concept of education, all the current philosophies have been happily co-ordinated. A writer has nicely remarked, "Gandhiji's philosophy of education is naturalistic in its *settings*, idealistic in its *aims*, and pragmatic in its *methods* and *programme of work*."

We must mention, however, that inspite of our best efforts and attempts, Basic education has not thrived up to our expectation. It has some weaknesses and limitations.

This scheme is not exactly suited to modern Indian background. Moreover, the basic 'craft' which is the 'pivot' of Basic education fails to properly 'correlate' all the *academic* subjects in the curriculum. Besides, the idea of 'self-sufficiency' or 'self-support' is of doubtful value, because, the articles produced and goods manufactured by the school pupils can hardly compete in quality with the finished goods available in the market. Hence they are not saleable and cannot meet the expenditure for the maintenance of the schools.

Moreover, the intellectual aspect of the pupils is not fully emphasized in this scheme of education. The intellectual calibres of the students coming out of Basic schools compare unfavourably with those of the other students from other types of institutions. Basic education is not, therefore, accorded the same status and importance as secondary education. Students who are the products of Basic education feel frustrated apprehending their future career to be doomed. They do not get sufficient avenues for vocation or employment, which was the primary objective of Basic education.

Gandhiji, however, evolved the scheme with a view to enlightening the *common mass* of the people and to providing them with free and compulsory education. He had to think of *'craft'*, finding no other means of obtaining help from the foreign rulers. But, at present, things have changed. India is now free and we have our national government. Had Gandhiji been alive now, he would have certainly thought of recasting and remodelling his plan so as to fit it with the existing conditions of the country.

Probably, he would have thoroughly overhauled the scheme and refashioned it in an entirely different manner. If we seriously keep in view the limitations of the system and remedy them and implement the scheme by modifying it with productive ideas, we believe that it will carry us far and will prove to be a sound scheme of education and a proper means for serving mankind thereby.

Professor V. K. R. V. Rao, the then Union Minister for Education and Youth Services, India, aptly remarked, "Gandhiji wanted to concretise his concept of the goal of man. The answer he found was that it should be search for truth, and pursuit of truth is impossible without non-violence. Thus, he conceived the idea of the interdependence of Truth and Non-violence. To him, truth and non-violence meant the emancipation of man, the re-awakening of his inner-self, and clarity of the concept of his goal of collective prosperity. ***** A votary of peace, his heart overflowing with love and compassion, an inveterate believer in man's capacity for goodness, possessed of an indomitable will expressing itself in an iron discipline extending over the many decades of his life on earth, Gandhi was essentially a man of God."

On Gandhiji's passing away, Professor Radhakrishnan observed, "Gandhi has not escaped the fate of being misunderstood and hated. He has met his death facing the forces of darkness, of ultimate unreason, and through it has increased the powers of light, love and reason. Who knows if Christianity would have developed had Jesus not been crucified? Years ago Romain Rolland declared that he regarded Gandhi as a 'Christ who only lacked the cross'. We have now given him the cross also. Gandhi's death was a classical ending to his life. He died with the name of God on his lips and love in his heart."

It would not be an exaggeration to mention that most of the remarkable work in the field of educational reconstruction in free India is being pursued on the lines designed by Gandhiji. He had a universal vision, strong initiative and deep insight into the manifold problems of our country. He was a powerful beacon light, a tower of philosophical wisdom, a constructive genius, a seer, a humanist, an educationist and a great reformer of modern India. He is rightly designated as the Father of the Nation and an apostle of truth and non-violence, the most outstanding figure in modern times. He was 'the light of India', the radiance of which had not only penetrated into the darkest recess of our country, but also spread and illumined the minds of men all over the wide world. Let us try to be worthy of the rich legacy he has left us and carry aloft the torch of truth, love, peace and non-violence he has kindled.

CHAPTER 13

Gleanings from Sri Aurobindo, the Apostle of Integral Education (1872-1950)

An Integral Education :

"An altogether new trend in education has to be set up—a synthetic trend,—that is, of *integration*. That does not mean only intellectual co-ordination, as is often understood by it. It really means a new approach of *will,* that of accepting all and trying to harmonize them. It implies infusing all education with the joy of *wholeness,* of *harmony,* of *creation*."

* * * * *

"Education to be complete must have *five* principal aspects relating to the *five* principal activities of the human being: the physical, the vital, the mental, the psychic and the spiritual. Usually these phases of education succeed each other in a chronological order following the growth of the individual. This, however, does not mean that one should replace another but that all must continue, completing each other, till the end of life."

* * * * *

Mind—the Instrument of the Educationist :

"The instrument of the educationist is the mind or *antahkarana,* which consists of *four* layers. The reservoir of past mental impressions, the *chitta* or storehouse of memory, is the foundation on which the other layers stand. The second layer is the mind proper or *manas,* the sixth sense of our Indian psychology. Its function is to receive the images of things. The third layer is the intellect or *buddhi,* which is the real instrument of thought. There is a fourth layer of faculty which, not as yet entirely developed in man, is attaining gradually to a wider development and more perfect evolution."

* * * * *

Aim of Education :

"Every one has in him something divine, something his own, a chance of perfection and strength. The chief aim of education should be to help the growing soul to draw out that in itself which is best and make it perfect for a noble use."

* * * * *

Child Study and Method of Education :

"Every child has an insatiable intellectual curiosity and turn for metaphysical inquiry. Use it to draw him on slowly to an understanding of the world and himself. Every child has the gift of imitation and a touch of imaginative power. Use it to give him the groundwork of the faculty of the artist."

* * * * *

"The true basis of education is the study of the human mind, infant, adolescent and adult. Any system of education founded on theories of academic perfection, which ignores the instrument of study, is more likely to hamper and impair intellectual growth than to produce a perfect and perfectly equipped mind."

* * * * *

Educator's Responsibility :

"The educationist has to do, not with dead material like the artist or sculptor, but with an infinitely subtle and sensitive organism. He cannot shape an educational masterpiece out of human wood or stone; he has to work in the elusive substance of mind and respect the limits imposed by the fragile human body."

* * * * *

Principles of Teaching :

"The first principle of true teaching is that nothing can be taught. The teacher is not an instructor, he is a helper and a guide. His business is to suggest and not to impose. He does not actually train the pupil's mind, he only shows him how to perfect his instruments of knowledge. He does not impart knowledge to him, he shows him how to acquire knowledge for himself."

* * * * *

"The second principle is that the mind has to be consulted in its growth. The idea of hammering the child into the shape desired by the parent or teacher is a barbarous and ignorant superstition."

* * * * *

"The third principle of education is to work from the near to the far, from that which *is* to that which *shall be*."

* * * * *

Medium of Education:

"The first attention of the teacher must be given to the medium. . . . . . One who has mastered his own language, has one very necessary facility for mastering another. With the linguistic faculty unsatisfactorily developed in one's own tongue, to master others is impossible. The mother tongue is the proper medium of education and therefore the first energies of the child should be directed to the thorough mastering of the medium."

* * * * *

The Teacher and His Work:

"Teachers who do not possess a perfect calm, an unfailing endurance, an unshakeable quietness, who are full of self-conceit, will reach nowhere."

* * * * *

"His first work is to interest the child in life, work and knowledge, to develop his instruments of knowledge with the utmost thoroughness, to give him mastery of the medium he must use. Afterwards, the rapidity with which he will learn will make up for any delay in taking up regular studies, and it will be found that, where now he learns a few things badly, then he will learn many things thoroughly well."

* * * * *

Physical Education :

"We must make our body strong and supple so that it may become in the material world a fit instrument for the *truth-force* which wills to manifest through us. In fact, the body must not rule, it has to obey. By its very nature it is a docile and faithful servant. Calm and quiet, strong and poised, it will at every minute put forth the effort that is demanded of it. In this sound and balanced life a new harmony will manifest in the body, and this harmony will be progressive."

* * * * *

Pursuit of Truth :

"As we rise to perfection which is our goal, we shall perceive that the truth we seek is made up of *four* major aspects: Love, Knowledge, Power and Beauty. These *four* attributes of the Truth will spontaneously express themselves in our being."

* * * * *

Moral and Religious Education :

"The education of the intellect divorced from the perfection of the moral and emotional nature is injurious to human progress. To neglect moral and religious education altogether is to corrupt the race. As in the education of the mind, so in the education of the heart, the best way is to put the child into the right road to his own perfection and encourage him to follow it, watching, suggesting, helping, but not interfering."

* * * * *

"The old Indian system of the *Guru* commanding by his knowledge and sanctity the implicit obedience, perfect admiration, reverent emulation of the student was a far superior method of moral discipline. The first rule of moral training is to suggest and invite, not command or impose. The best method of suggestion is by personal example."

* * * * *

"Religion has to be lived, not learned as a creed. No religious teaching is of any value unless it is lived, and the use of various kinds of *sadhana,* spiritual self-training and exercise is the only effective preparation for religious living."

* * * * *

"The essence of religion, to live for God, for humanity, for country, for others, and for oneself in these, must be made the ideal in every school."

CHAPTER 14

Gleanings from Radhakrishnan, the Protagonist of the Religious Ideal in Education (Born in 1888)

Pre-conditions of Cultural Life and Education :

"For thinking minds to blossom, for arts and sciences to flourish, the first condition necessary is a settled society providing security and leisure. A rich culture is impossible with a community of nomads, where people struggle for life and die of privation."

* * * * *

Pre-requisites of Spiritual Life and Religion :

"The Indian never felt that the world was a field of battle where men struggled for power, wealth and domination. When we do not need to waste our energies on problems of life on earth, exploiting nature and controlling the forces of the world, we begin to think of the higher life, how to live more perfectly in the spirit."

* * * * *

Freedom and Discipline :

"Free society should consist of free men, and men are not made free merely by the removal of the external constraint. Freedom is a function of mind and spirit. If we do not possess freedom of thought and freedom of conscience, we are not truly free."

* * * * *

"We should not let the pupil grow in anarchy and confusion, we should not on the other hand coerce his mind and regiment his thoughts. The dignity of mind must be preserved at any cost. Our supreme task is to raise the quality of human beings. We cannot do this without knowledge, discipline and a sense of values."

* * * * *

"Wealth is not all. It cannot buy the best things. The most desirable possessions, happiness of mind and heart, contentment and good will are beyond the purchase of money. Men are not mere workers or producers of wealth. They are human beings, and human values like love of beauty and cultivation of mind have an appeal to them."

* * * * *

"To raise the illumined consciousness from the intellectual plane, these qualities are essential—*abhaya, asanga* and *ahimsa. Abhaya* or freedom from fear is something we acquire by deepening our awareness and growing into a larger world. *Asanga* or non-attachment is the way by which we should act in this world. Similarly, *ahimsa* is freedom from hatred and it is the cultivation of love."

* * * * *

"We must habituate the students to right emotions, induce in them the formation of good moral, mental and physical habits. Our attempt should be to suggest and persuade, not command or impose. The best method of suggestion is by personal example, daily life and work, and books read from day to day."

* * * * *

The Teacher:

"We teachers, who are seekers, learners and propagators of truth, form the intellectual conscience of our community. We must have a clear conception of the goal we have in view."

* * * * *

The Future of Civilization:

"The future civilization will have to rise to a universal vision of man and human life. The provincial cultures of the past and the present have not always been loyal to the true interests of the human race. They stood for racial, religious and political monopolies, for the supremacy of men over women and of the rich over the poor. Before we can build a stable civilization worthy of humanity as a whole, it is necessary that each historical civilization should become conscious of its limitations and its unworthiness to become the ideal civilization of the world."

* * * * *

International Understanding and Universal Brotherhood of Mankind:

"Today the world has become a much smaller place, thanks to the adventures and miracles of science. Foreign nations have become our nextdoor neighbours. Mingling of populations is bringing about an interchange of thought. We are slowly realizing that the world is a single co-operative group. Other religions have become forces with which we have to reckon, and we are seeking for ways and means by which we can live together in *peace* and *harmony*."

* * * * *

"In the world today we have pledged ourselves to international co-operation and peace. There is no isolation any more, geographical, political, economic or cultural. The spirit of co-operativeness is to be carried beyond the nation to the *community of nations*. Democracy means respect for the opponent in politics, ethics and religion."

* * * * *

"One of the major causes of misunderstanding and conflict among individuals and groups is the habit of the uncritical acceptance of beliefs and doctrines and transmissions of them to our children through the methods of teaching, conditioning and indoctrination."

* * * * *

Danger of Bigotry and Fanaticism:

"We must not be carried away by sentiment. What is responsible for the communal excesses is not religion as such but the ignorance, bigotry and selfishness with which religion gets mixed up. Selfish people, in an attitude of cynical opportunism, use religion for their own sinister ends."

Quest for Truth:

"Whatever work we do, we should do it with a sense of dedication. Most of us think that we pursue truth, but we are really far away from truth. We indulge in loose talk, backbiting, personal adventurism and whispering slander in the name of truth. These are deviations from the true methods of search for truth."

The Spirit in Man:

"If we are asked to define what the *spirit* in man is, it would be difficult to give a definite answer. We know it, but we cannot explain it. It is felt everywhere though seen nowhere. It is not the physical body or the vital organism, the mind or the will, but something which underlies them and sustains them. It is the basis and background of our being. ..... When the *supreme light* in us inspires the intellect we have genius, when it stirs the will we have heroism, when it flows through the heart we have love, and when it transforms our being, the son of man becomes the *son of God.*"

True Religion :

"Religion is not to be identified with a creed to be believed, or an emotion to be felt, or a ceremony to be performed. It is a changed life. We do not judge a man's religion by his intellectual beliefs but by his character and disposition."

Need for Spiritual Values in Education :

"Spiritual values will have to be incorporated into our educational system. It is, therefore, essential that if you are to develop any kind of spiritual values, you must subject yourself to considerable self-scrutiny. That is the meaning of meditation. Mere intellectual learning or mere pedantry does not take you to God."

Index

Aaron, Richard, 19
Abhaya, 268
Absolute, 99, 100, 189, 241
Absorption, 88, 89
Academic Council, Calcutta University, 197
Acharya, 220
Acid test, 244, 248
Activity Methods, 64
  „ Principle, 154
Adam's Reports, 193
Adams, Herbert B., 128
Adams, Sir John, 20, 162
Adi Brahmo Samaj, 183, 213
Adult control, 178
  „ interference, 178
  „ intervention, 178
Adventurism, 271
Aesthetic subjects, 92
Agriculture, 131
Ahimsa, 235, 236, 237, 241, 243, 268, 269
Aim of education, 6, 45, 192, 222, 244, 262
Almighty Father, 207
All-round development, 74, 244
Alsted, Professor, 2, 6
Amritsar Massacre, 187
Analogy, 15
Ananda, 190, 218
Anschauung, 79
Antahkarana, 262
Anthropology, 157
Apara vidya, 225
Apperception, 85, 86
Apperceptive mass, 85, 86, 87, 90
Aptitudes, 195
Arab International Delegation, 254
Aram, Dr. M., 236
Architecture, 111, 117
Aristotle, 5, 27
Aristotelian Faculty Psychology, 84
Arithmetic, 10, 95, 136, 146, 171
Arjuna, 133
Arnold, Dr., 20
Art, 103, 148, 203
Art of speaking, 31
Arundale, Dr. G. S., 177
Asanga, 268
Asrama ideal, 199
  „ *school,* 186
Association, 89, 91
Astrology, 9
Astronomy, 9, 10, 43, 50, 116
Asutosh, Sir, 197
Atmanam viddhi, 228
Atma-samjam, 251
Author of Nature, 40
Auto-education, 160, 165, 173, 174, 177
Avidya, 220
Awakening, 221

Bacon, 5, 6, 7
Badarikashrama, 217

Basic Education, 107, 149, 154, 237, 240, 247, 249, 250, 253
Basu, Anathnath, 208
Batsch, 96
Baul, 194
Beacon light, 260
Beatty, 44
Belur Math,, 233
Benevolent superintendent, 109, 161
Bengali, 210, 231
Bhagvad Gita, 132, 224, 242
Bhatia, Hans Raj, 257
Bhishma, 224
Bible, 218
Bigotry, 271
Biology 111, 113, 116
Blake, William, 202
Blank tablet, 26, 84
Bodmer, 62
Book learning, 67
Botany, 9, 53, 95
Boultwood, 127
Bowen, Mr., 110
Boyd, William, 9, 30, 95, 113, 138, 140, 142, 145, 155
Brahmachari, 29
Brahmacharya, 199, 226, 234
Brahmacharya Vidyalaya, 186
Brahmanic ideal, 199
  ,, system, 29
Brain-fag, 249
Breathing of the mind, 88
Bridges of Understanding, 215
Buddhi, 262
Burgdorf, 64, 79
Burlington, 127

Caird, John, 218
Campanella, 5, 6
Cape Comorin, 215, 217
Carmichael, Leonard, 153
Casa dei Bambini, 158, 166
Censor of civilization, 37
Central Advisory Board of Education, 254
Character, 88, 92, 93, 223
Character building education, 222
Chatterjee, Nirmal Chandra, 207
Chemistry, 8, 53, 97, 111
Chicago, 215
Child-centric education, 143
  ,, ,, tendency, 39
Child emancipation, 161
  ,, gardening, 46, 109, 226
  ,, psychology, 161
  ,, study, 25
Child's Charter, 60
Children's House, 158, 159, 160, 166
Chit, 218
Chitta, 262
Chronology, 31
Cicero, 14
Circle of thought, 83, 88
Civics, 9, 72
Civilization, 269
Classics, 19, 28, 114
Clean slate, 26, 84
Clearness, 89
Coercion, 9
Cole, Luella, 155, 180
College of Light, 11
Collyrium, 220
Comenius, John, 1-18, 31, 39, 51, 83, 100, 176
Community of nations, 270
Compensation, 174

Complete living, 45, 46, 114, 115, 126
Concentration, 225
Conduct of the Understanding, 23
Conflict, 190
Confluence, 214
Conscience, 268
Consecration ceremony, 217
Copernicus, 44
Correlated teaching, 255
Correlation of studies, 87, 108
Creative activity, 191
  „ energy, 101
  „ self-expression, 257
Cube-song, 104
Culture-epoch theory, 122
Curtis, 127

Dakshineswar, 212, 213
Dalton Laboratory Plan, 180
Dance, 31, 199, 210
Daridra narayana, 245
Day-dreaming, 175
Dead material, 263
Dees, J. L., 188
Democracy, 270
Democracy and Education, 130
Demonstration School, 80
Descartes, 213
Dewey, John, 41, 45, 80, 127-154, 155, 159, 179, 246
Dialectic, 10
Didactic Apparatus, 103, 159, 166, 177
Didactica Magna, 3, 4
Directress, 156, 159, 161, 178
Disciplinary conception, 23, 25
Discipline, 23, 24, 56, 73, 92. 108, 118, 152, 162, 251, 268
Discipline by natural consequences, 23, 49, 56, 121
Divine Principle, 99
  „ Providence, 107
Diwan, 235
Doctrine of Ideas, 85
Doing school, 145
Domestic Science, 231
Drama, 210
Drawing, 31, 117
Dubey, M. C., 246
Durban, 236
Durgacharan, 211
Dutta, Viswanath, 211

East, 210
Economics, 9, 111
Educare, 219
Education factory, 195
Education of Man, 97
Education of the heart, 266
  „ of the intellect, 266
  „ of the mind, 266
Educational formalism, 112
Ekamevadwitiyam, 100, 189
Elusive substance of mind, 263
Emancipation, 259
Emile, 14, 16, 21, 34, 60, 63, 120, 186, 223, 248
Emotion, 198
Emotionalism, 38
Emotional development, 54
Emulation, 266
Encyclopaedias, 6, 7
Encyclopaedic knowledge, 31
English, 31, 185, 194, 210
Enlightenment, 33
Epic, 191

Essay Concerning Human Understanding, 21
Essays on Educational Reformers, 14
Eternal Vine, 202
Ethics, 10, 72, 129
Evening Hours of a Hermit, 66
Experience, 53, 132, 133, 136, 151, 152
Experience and Education, 136, 151, 152
Experimentalism, 132
Experimental Pedagogy, 161
  „ Psychology, 157
  „ School, 80, 128, 131, 138
Expression, 102

Facts and Comments, 112
Faculty Psychology, 27, 84, 179
Fakir, 214
Fairy tale, 175
Fanaticism, 271
Fancy, 174
Fantasy, 174
Father's Journal, 63
Father of the Nation, 253, 260
Fichte, 78, 96, 98
Fine Arts, 148, 210
Fixed entity, 147
Flying to birds, 9
Ford, Henry, 248
Formal discipline, 27
  „ method, 86
  „ schooling, 184, 188
  „ steps, 82, 88, 89, 92
Free children, 159
  „ education, 165
Freedom, 95, 152, 154, 161, 162, 165, 176, 193, 208
Freedom of heart, 192
  „ of mind, 192
  „ of will, 192
Froebel, 33, 41, 54, 58, 94-110, 137, 143, 176, 178, 190, 191, 218, 221, 222, 226, 241
Froebelianism, 58

Gandhi, Kaba, 235
Gandhiji, 107, 154, 221, 233, 235-260
Garden of Children, 97
Gate of Tongues Unlocked, 3
Generalization, 85, 91
Genetic method, 88
Geography, 10, 31, 43, 53, 87, 146, 191, 248
Geology, 97, 116
Geometry, 10, 28, 95, 111, 172
Ghosh, Dr. J.C., 150
Gifts and Occupations, 103, 105, 106, 109
Giovanni, De, 156
Giri, V. V., 217
Gitanjali, 187, 206, 207
God, 6, 30, 184, 188, 222, 223, 230, 235, 242, 272
Goethe, 96
Golden rules, 119
Good breeding, 29, 92
Good, H. G., 25, 34
Graves, Dr., 56, 57, 145, 179
Great Didactic, 4, 5, 8, 14
Greek, 10, 77
Greeley, Horace, 131
Guidance, 118
Guide, 159, 221

Guru, 214, 221
Gurugriha-vasa, 229
Guru pronam mantra, 220
Gymnasium, 8, 10, 16, 78

Hall, G. Stanley, 128
Hand, development of, 72
Harijan, 245
Harmony, 188, 261, 270
Hartlib, Samuel, 3
Hastie, W. W., 213
Haves, 244
Have-nots, 244
Head, development of, 72
Health, 24
Heart, development of, 72
Hebrew, 10
Hedonistic ethics, 121
Hegel, 100
Hegelian idea, 136
Hemendranath, 184
Herald of New Education, 18
Herbart, J. F., 17, 22, 41, 58, 76, 77-93, 107
Herbartian Method, 88
  „ Psychology, 84
  „ Steps, 82
Hindu civilization, 224
History, 9, 10, 31, 43, 53, 87, 88, 111, 185, 210, 231, 248
Horseback riding, 31
Hudson, Professor, 44
Human conflicts, 216
  „ contrasts, 216
  „ stone, 263
  „ wood, 263
Humanism, 190
Humanist, 232, 260
Humanitarianism, 217, 232
Humanitarian ideal, 211

Idealism, 55, 78, 252
Idealist, 55, 124
Idealistic Philosophy, 98
Illumination Movement, 38
Imagination in education, 174-176
Impression, 102
Indian education, 177
Indian Education Commission, 244, 256
Individual and Society, 243
Individualism, 74, 120, 124
Individuality, 201
Individual differences, 13, 79
Industrial activity, 143, 154
Industrial Revolution, 124, 130, 131, 138
Infant School, 13
Infinite Bliss, 218
Instruction, 92, 93
Instrumentalist, 132
Integral education, 261
Integration, 261
Intellect, 12, 160, 194, 198
Intellectual co-ordination, 261
  „ development, 57
  „ education, 21, 24, 29, 112, 119, 125
  „ habits, 24
Interconnectedness, 218
Internationalism, 190
Intuition, 17
Iron discipline, 259
Isherwood, Christopher, 213

Jalianwalabag Tragedy, 187
Janua Linguarum Reserata, 3
Jatra, 194
Jnana, 242
Jnana-yoga, 242
Joy, 143, 144, 176

Kabir, Humayun, 209
Kamala Lectures, 208
Kant, Immanuel, 78, 80, 85, 87
Kanya Kumarika, 217
Karma, 132, 242
Karma-yoga, 242
Kathakata, 194
Kavigan, 194
Kindergarten, 10, 97, 98, 102, 106, 107, 143, 190, 191
Kirtan, 194
Knighthood, 187
Komensky, 1
Kothari Commission, 256
Kuvera's wealth, 224

Laboratory School, 128, 138
Latin, 10, 13, 31
Latin School, 2, 8, 10, 16
Law of Unity, 218
Learning, 29, 200
Learning by doing, 33, 97, 119, 142, 256
Leibnitz, 1
Leisure, 267
Leonard and Gertrude, 68, 75
Letters on Toleration, 21
Lewis de Geer, 3
Life-building education, 222
Light of India, 260
Lincoln, 138, 238
Locke, John, 12, 19-35, 52, 54, 61, 73, 84
Logic, 78, 129
Logos, 107
Lombroso, 156
Lord Krishna, 133
Love, 229, 260, 265, 272

Mahabharata, 224
Mahasamadhi, 215
Mahavira, 224
Make-believe play, 207
Mallik, Gurdial, 204
Man-making education, 222
Man of God, 259
Manas, 262
Mann, Horace, 153
Manual labour, 257
Manysidedness, 219
Martyrdom, 238
Mass elementary education, 149
Mazumdar, Haridas, T., 238
Meditation, 213
Medium of education, 264
Mental development, 72
Metaphysics, 78, 83, 100, 129
Metaphysical inquiry, 262
Method of education, 225
Middle Ages, 7
Mill, John Stuart, 212
Miracles of science, 270
Model school, 96
Modern Bharat, 210
Monadology, 85
Monroe, P., 11, 39, 44, 65, 70
Montaigne, 39
Montessori, Maria, 41, 58, 76, 103, 155-180, 226
Montessori Method, 143, 158, 162, 179
Montessori School, 178
Moral aim, 82
  „ development, 72
  „ discipline, 266
  „ education, 29, 30, 112, 120, 125, 141, 266
  „ habits, 24, 30
  „ perfection, 54
  „ training, 30, 52, 54
Moravia, 1
Morley, 38

Morris, George S., 128
Mother's Knee, 8, 13, 16
„ Lap, 8
Mother School, 13
Muscles of iron, 224
Music, 10, 31, 77, 78 117, 185, 199, 203

N.C.E.R.T., 18, 243, 246
Nai Talim, 238, 240, 243, 249
Naked Fakir, 214
Nalanda, 205
Naren, 211
Narendranath, 211, 214, 215
Natal Indian Congress, 237
National education, 69
„ government, 194
Nature-ist, 124
Nature-mysticism, 213
Nature Study, 101, 173
Natural consequences, 52, 75
Naturalism, 38, 55, 190
Naturalist, 23, 55, 120
Naturalistic doctrine, 71
Negative education, 47, 48, 52, 55, 74
Nehru, Jawaharlal, 234, 238
Nerves of steel, 224
Neuhof, 63, 67
New Education, 176, 238, 243, 249, 256
New England, 127
Newer education, 133
Nobel Prize, 187
Noble savage, 37
Nomads, 267
Non-attachment, 268
Non-violence, 236, 241, 257
Nunn, Percy, 123, 162

Obeisance to preceptor, 220
Observation Method, 64
Occupational institutes, 151
Of the Conduct of the Understanding, 21
Opportunism, 271
Orbis Sensualium Pictus, 4, 10
Origin of Inequality among Men, 37
Orthophrenic School, 156, 157

Painting, 117, 199, 210
Panentheism, 100
Pansophic school, 3, 4
Pansophis Prodromus, 3
Pantheism, 100
Pantheistic creed, 95
Para vidya, 225
Parkhurst, Miss Helen, 180
Parliament of Religions, 215
Pathshalas, 193
Pedagogy, 11, 39, 79, 81, 92, 128, 129
Pierce, Charles C., 128
Perfection, 219
Pestalozzi, 16, 22, 32, 34, 41, 57, 58, 61-76, 80, 81, 96, 106, 108, 120, 137, 140, 172, 201, 221, 222, 227
Pestalozzian Institute, 96
„ movement, 64
Pestalozzianism, 58, 79, 96
Philosophy, 19, 21, 78, 79, 81, 95, 107, 128, 134, 135, 185
Physical development, 52, 72
„ education, 20, 21, 23, 29, 32, 112, 121, 122
Physical habits, 24
Physics 8, 10, 53, 78, 97, 111
Physiology, 113, 185

Piety, 6, 17, 34
Plato, 14, 80, 82, 124, 220, 252
Play, 191
  „ -activity, 98
  „ -element, 102
Playway in education, 33, 109, 180, 191
Poetry, 117, 148, 185, 203, 239
Politics, 21, 59, 113, 117, 259
Pragmatism, 131, 257
Pratap Singh, 224
Preparation, 89
Presentation, 89
Problem method, 143
Process of growth, 147
Progressive education, 133, 156
Project method, 143, 144, 180
Prophet, 211, 232
Prophetism, 239
Psychiatric clinic, 155
Psycho-analytic doctrine, 174
Psychology, 21, 25, 80, 81, 83, 113, 128
Psychological movement, 58, 65
  „ tendency, 137
Public school, 153
Puranas, 231

Quadrivium, 10
Quick, R. H., 14, 20, 43, 56, 58, 61, 69

Rabindra Bharati, 210
Radhakrishnan, Professor, 188, 259, 267-272
Radicalism, 27
Ramakrishna Math, 217
  „ *Mission,* 217
  „ *Order,* 215
Ramakrishna Paramahansa, 212, 213, 214, 215, 241
Ramayana, 224, 235
Rao, V.K.R.V., 259
Rationalism, 23, 27
Rationalistic movement, 33
Ratke, Wolfgang, 2
Reading, 87, 136, 146, 169, 171
Reason, 12, 17, 19, 107
Recapitulation theory, 122
Reflection, 27, 88, 89
Reformation of schools, 3
Reid, John T., 89, 215
Religion, 17, 59, 72, 185, 196, 219, 224, 231
Religious education, 266
  „ instruction, 9
Reminiscence theory, 122
Renaissance, 64, 112, 124, 188
Right living, 67
  „ thinking, 67
Rishis, 223
Rolland, Romain, 231, 235, 259
Ross, 175
Rousseau, 11, 14, 21, 22, 23, 25, 34, 36-60, 61, 65, 65, 70, 74, 98, 101, 120, 223, 226
Running to animals, 9
Rural reconstruction, 204
Rusk, 7, 55, 93, 176

Sabarmati, 238
Sadhana, 266
Salutation to preceptor, 220
Samavartana Bhasana, 208
Samanvaya, 203
Sanskrit, 185, 210, 231
Santiniketan, 186, 187, 196, 199, 201, 204, 207, 210, 237
Sarkar, Sunil Chandra, 192, 205
Sarvam khalvidam Brahma, 100, 189

Sat, 218
Satyagraha, 236
Schelling, 95, 96, 98
Schiller, 96, 123
Schiller-Spencer Theory, 123
School and Society, 151
School of Infancy, 10
Science of Teaching, 13, 14
Scientific Method, 126
  „ Movement, 111
Scottish Churches College, 213
Sculpture, 199
Seguin, Edouard, 156, 159
Self-activity, 82, 97, 98, 100, 102, 108, 143, 257
Self-confidence, 237, 251
  „ -control, 162, 251
  „ -development, 54, 67
  „ -direction, 143, 162
  „ -discipline, 108, 199, 251
  „ -education, 111, 165
  „ -expression, 208
  „ -government, 108
  „ -growth, 220
  „ -help, 199, 237
  „ -illumination, 242
  „ -knowledge, 251
  „ -love, 54
  „ -perfection, 54
  „ -preservation, 114, 115, 118
  „ -realization, 242
  „ -regarding sentiment, 227
  „ -reliance, 199, 251
  „ -reverence, 251
  „ -scrutiny, 272
  „ -support, 258
Senate of Calcutta University, 197
Senses, 12, 23, 34, 51, 69, 119, 156, 167
Sense-experience, 51
  „ -perception, 76
  „ -realism, 11
  „ -realist, 11, 23
  „ -training, 15, 51, 58, 105, 158, 166, 169, 179, 201
Sense of dedication, 271
  „ of values, 268
Sergi, Giuseppe, 155
Sevagram, 238
Shakespearean tragedy, 175
Shelley, 212
Shiva, 232
Shivaji, 224
Shraddha, 227, 228, 234
Siksha-Satra, 204
Silent social revolution, 245
Sita, 231
Skylark, The, 232
Sleep of reason, 48
Smith, Charles T., 125
Sobriety, 19
Social continuity, 137
  „ Contract, 37
  „ education, 194
  „ ideal, 127
  „ insight, 145
  „ life, 141
  „ need, 72
  „ order, 164
  „ progress, 257
  „ Realist, 22
  „ sense, 203
  „ Studies, 248
Society and Individual, 243
Society in miniature, 159
Sociological interest, 66
Sociology, 9, 113, 117
Socrates, 81, 220

Some Thoughts Concerning Education, 20, 21, 22
Song Offerings, 192
Sophie, 50, 51, 54, 55, 57
Spelling, 87
Spencer, Herbert, 41, 45, 58, 76, 111-126, 149, 212
Sphere-song, 104
Spinning wheel, 240
Spinoza, 100
Spirit, 99, 267, 271
Spiritual enlightenment, 212
  „ values, 272
  „ regeneration, 216
Spiritualism, 217, 232
Spontaneity, 165, 176
Sri Aurobindo, 221, 261-266
Sriniketan, 196, 204, 239
Suggestion, 266
Summum bonum, 232, 241
Supernaturalism, 125
Supreme All-Powerful Being, 189
Supreme Light, 271
Surplus energy theory, 123
Swami Nikhilananda, 234
Swami Ranganathananda, 232
Swami Tejasananda, 214, 215
Swami Vireswarananda, 217, 225
Swami Vivekananda, 71, 211-234, 239, 240
Swan Song, 71, 75
Swimming to fish, 9
Tabula rasa, 12, 26, 27, 34, 84, 220
Tagore centenary, 209
Tagore Dwarkanath, 183
  „ Maharshi Devendranath, 183, 185, 213
Tagore Rabindranath, 183-210, 217, 218, 224
Tattva-bodhini Patrika, 185
Teacher, 199, 200, 229, 252, 257, 269
Teacher of all times, 18
Teacher of teachers, 5
Teacher Rabindranath, 186
Technology, 131, 256
Telling, 90
Theology, 10, 62
Theosophical Society, 177
Thinking school, 145
Thirty Years' War, 2
Thomson, G. H., 144, 145
Three H'S, 72
  „ R'S, 107, 146, 169, 179
  „ sources of education, 46
Tolstoy Farm, 238
Total manhood, 220
Tower of philosophical wisdom, 260
Traditional schools, 184
Transfer of training, 28
Transformed home, 66, 73
Transvaal, 237
Travel, 8, 31, 117
Treaty of Westphalia, 4
Trivium, 10
Truth, 257, 259, 260
Truth-force, 265

U. K., 253
U.S.I.S., 209
U.S.S.R., 253
Ulich, Robert, 22, 110, 137
Unitary conception of mind, 28
United States of America, 209, 215, 216, 233, 234, 253

Universal brotherhood, 244
Universal man, 210
University of Calcutta, 187, 197, 250
Unlettered saint, 212
Upanishad, 224, 242
Upanishadic doctrine, 100
„ philosophy, 189
Utilitarianism, 124
Utilitarian philosophy, 132

Vedanta Philosophy, 215, 216
Vedantic Doctrine, 100
Verma, I. B., 243
Vermont, 127
Vernacular school, 8, 10, 13, 16
Vinaya Bhavana, 192
Virtue, 6, 19, 29, 30, 34, 82, 83, 93
Visible world, 10
Visva-Bharati, 187, 189, 196, 204, 205, 206, 207, 209
Vivekananda *Shila*, 217
Vivekananda, Swami, 71, 211-234, 239, 240
Vocational School, 146
Voltaire, 33, 38
Votary of peace, 259

Wallas, Graham, 109
Wardha, 238
Wardha Scheme, 149
Washburne, 144
Wax tablet, 12
Weakness, 52, 223
West, 210, 217
Westernization, 195
Whirlwind, 215
White sheet of paper, 26, 34
Whole man, 223, 249
Wickedness, 52, 223
Will, 261, 271
Winnetka, 144
Wordsworth, William, 101, 212, 213, 216
Work, 178, 245, 246, 254
Work experience, 256
World culture, 189
World in Pictures, 4, 10
Wrestling, 31, 212
Writing, 31, 87, 136, 146, 169

Youth Services, 259
Yverdun, 64

Ziller, 89, 122
Zoology, 9
Zurich, 61

Bibliography

GENERAL

Monroe, P. A Text-Book in the History of Education (*Macmillan*).

Monroe, P. A Brief Course in the History of Education (*Macmillan*).

Graves, F. P. A Student's History of Education (*Macmillan*).

Graves, F. P. Great Educators of Three Centuries (*Macmillan*).

Graves, F. P. A History of Education in Modern Times (*Macmillan*).

Curtis, S. J. and Boultwood, M. E. A. A Short History of Educational Ideas (*University Tutorial Press, London*).

Cole, L. A History of Education: Socrates to Montessori (*Holt, Rinehart & Winston, N. Y.*).

Good, H. G. A History of Western Education (*Macmillan*).

Boyd, W. The History of Western Education (*Adam & Charles Black*).

Boyd, W. From Locke to Montessori (*George G. Harrap*).

Quick, R. H. Essays on Educational Reformers (*Longmans*).

Ulich, R. History of Educational Thought (*American Book Co.*).

Ulich, R. Three Thousand Years of Educational Wisdom (*Harvard University Press*).

Rusk, R. R. The Doctrines of the Great Educators (*Macmillan*).

Knight, E. W. Twenty Centuries of Education (*Ginn & Co., Boston*).

Adamson, J. Pioneers of Modern Education (*Cambridge University Press*).

Barnard, H. German Teachers and Educators (*Hartford Brown & Gross*).

Cubberley, E. P. A History of Education (*Houghton Miffin Co., Boston*).

Cohen, A. and Garner, N. Readings in the History of Educational Thought.

Duggan, S. P. Students' Text-Book in the History of Education (*D. Appleton, N. Y.*).
Kane, W. J. and Obrien, J. J. History of Education.
Painter, F. A History of Education (*D. Appleton, N. Y.*).
Misawa, T. Modern Educators and their Ideals (*D. Appleton*).
McCormick. History of Education.
Eby, F. and Arrowood. C. F. The Development of Modern Education (*Prentice Hall, N. Y.*).
Mookerjee, K. K. New Education and Its Aspects (*Das Gupta & Co., Calcutta*).

ON COMENIUS

Comenius, J. A. Selections from His Works.
Comenius, J. A. The Orbis Pictus (*C. W. Bardeen, Syracuse*).
Keatinge, M. W. Comenius (*McGraw-Hill Book Co., N. Y.*).
Keatinge, M. W. The Great Didactic of John Amos Comenius (*Adam & Charles Black, London*).
Monroe, W. S. Comenius and the Beginnings of Educational Reform (*Scribner, N. Y.*).
Lang, O. H. Comenius: His Life and Principles of Education (*E. L. Kellog & Co.*).
Laurie, S. S. Johann Amos Comenius: His Life and Educational Work (*Cambridge University Press*).

ON LOCKE

Arrowood, C. F. John Locke on Education (*University of Texas*).
Quick, R. H. (Editor). Locke's 'Some Thoughts Concerning Education' (*C. J. Clay & Sons, London*).
Adamson, J. W. (Editor). The Educational Writings of John Locke (*Edward Arnold, London*).
Hodge, F. A. John Locke and Formal Discipline (*J. P. Bell*).

ON ROUSSEAU

Hoffding, H. Jean Jacques Rousseau and His Philosophy.
Boyd, W. The Educational Theory of Rousseau (*Longmans*).
Hudson, W. H. Rousseau and Naturalism in Life and Thought (*Scribner, N. Y.*).

Davidson, T. Rousseau and Education according to Nature (*Scribner, N. Y.*).
Rolland, Romain. The Living Thoughts of Rousseau (*Longmans*).
Archer, R. L. Rousseau on Education (*Longmans*).
Archer, R. L. (Editor). Jean Jacques Rousseau (*Barron's Educational Series, N. Y.*).
Morley, J. Rousseau and His Era (*Macmillan*).
Davidson, T. Rousseau (*W. Heinemann*).
Compayre, G. Jean Jacques Rousseau and Education from Nature (*George G. Harrap*).
Payne, W. H. (Translator). Rousseau's *Emile* (*Appleton*).
Tozer, H. J. Rousseau's 'The Social Contract' (*Scribner, N. Y.*).

ON PESTALOZZI

Green, J. A. Educational Ideas of Pestalozzi (*W. B. Clive*).
Green, J. A. Life and Works of Pestalozzi (*W. B. Clive*).
Green, J. A. Pestalozzi's Educational Writings (*Longmans*).
Holman, H. Pestalozzi: His Life and Work (*Longmans*).
Barnard, H. Pestalozzi and Pestalozzianism.
De Guimps, R. Pestalozzi: His Life and Works (*Appleton*).
Krüsi, H. Pestalozzi: His Life and Work (*American Book Co.*).
Compayre, G. Pestalozzi and Elementary Education.
Anderson, L. F. Pestalozzi (*McGraw-Hill, N. Y.*).
Pestalozzi, J. H. Leonard and Gertrude (*D. C. Heath*).
Pestalozzi, J. H. How Gertrude Teaches Her Children (*George Allen & Unwin*).

ON HERBART

Compayre, G. Herbart and Education by Instruction (*Harrap*).
De Garmo, C. Herbart and Herbartians (*W. Heinemann*).
Felkin, H. M. and Emmie. An Introduction to Herbart's Science and Practice of Education (*D. C. Heath & Co., Boston*).
Adams, J. The Herbartian Psychology Applied to Education (*D. C. Heath & Co., Boston*).
Davidson, J. A New Interpretation of Herbart's Psychology and Educational Theory (*William Blackwood & Sons Ltd.*).
Ufer, C. Introduction to the Pedagogy of Herbart (*Heath & Co.*).
Mullinger, B. C. The Application of Psychology to Education by J. F. Herbart.

Eckoff. Herbart's A B C of Sense Perception.
Lange, K. Apperception (*D. C. Heath*).
Darroch, A. Herbart and the Herbartian Theory of Education (*Longmans*).
Herbart, J. F. Outlines of Pedagogical Doctrines (*Macmillan*).

ON FROEBEL

White, J. Educational Ideas of Froebel (*W. B. Clive*).
Bowen, H. C. Froebel and Education through Self-Activity (*Scribner*).
Kilpatrick, W. H. Froebel's Kindergarten Principles Critically Examined (*Macmillan*).
Fletcher, S. S. and Welton, J. Froebel's Chief Writings on Education (*Longmans*).
Franks, F. The Kindergarten System (*S. Sonneschein & Co.*).
Hughes, J. L. Froebel's Educational Laws (*D. Appleton*).
Herford. The Student's Froebel.
Kraus-Bölte, M. and Kraus, J. The Kindergarten Guide.
Dwight, F. E. and Jarvis, J. Mother Play and Nursery Songs.
Bowen, H. C. On Education of Man.
Froebel, J. F. Pedagogics of the Kindergarten (*D. Appleton*).
Froebel, J. F. Mother Play (*D. Appleton*).
Froebel, J. F. Chief Educational Writings (*E. Arnold*).
Froebel, J. F. Education by Development (*D. Appleton*).
Froebel, J. F. The Education of Man (*D. Appleton*).
Froebel, J. F. Autobiography (*Swan, S. & Co.*).
Cole, P. R. Herbart and Froebel (*Columbia University Press*).
Hayward, F. H. The Educational Ideas of Pestalozzi and Froebel (*Ralph, Holland & Co.*).
Chalke, R. D. A Synthesis of Froebel and Herbart (*University Tutorial Press, London*).
Hayward, F. H. Pestalozzi and Herbart and Froebel (*Ralph, Holland & Co.*)

ON SPENCER

Compayre, G. Herbert Spencer and Scientific Education (*Thomas Y. Crowell & Co., N. Y.*).
Spencer, H. Education: Intellectual, Moral and Physical (*Watts & Co., London*).

Huxley, T. H. Science and Education (*D. Appleton*).
Williams, H. S. Story of Nineteenth Century Science (*Harper*).

ON DEWEY

Ratner, J. The Philosophy of John Dewey (*Henry Holt, N. Y.*).
Edman, I. John Dewey (*The Bobbs-Merril Co., N. Y.*).
Wirth, A. G. John Dewey As Educator (*Wiley Eastern*).
Nathanson, J. John Dewey (*Scribner*).
Mayhew, K. C. and Edwards, A. C. The Dewey School (*Appleton*).
Dewey, J. Democracy and Education (*Macmillan*).
Dewey, J. Experience and Education (*Macmillan*).
Dewey, J. The School and Society (*University of Chicago*).
Dewey, J. The Child and the Curriculum (*University of Chicago*).

ON MONTESSORI

Bailey, C. S. Montessori Children (*Henry Holt & Co.*).
Culverwell. The Montessori Principles and Practice.
Kilpatrick, W. H. The Montessori System Examined (*Houghton Miffin Co.*).
Smith, A. T. The Montessori System in Education (*U. S. Government Printing Office*).
Stevens. A Guide to the Montessori System.
Fisher. The Montessori Method.
Montessori, M. The Montessori Method (*Frederick A. Stokes, N. Y.*).

ON TAGORE

Pieczynska, E. Tagore Educateur (*Rousseau Institute, Geneva*).
Pearson, W. W. Shantiniketan (*Macmillan*).
Soares, A. X. Lectures and Addresses by Rabindranath Tagore (*Macmillan*).
Thompson, E. Rabindranath Tagore: His Life and Work.
Andrews, C. F. Thoughts from Tagore.
Sarkar, S. C. Tagore's Educational Philosophy and Experiment (*Visva-Bharati*).
Mukherjee, H. B. Education for Fulness (*Asia Pub. House*).
Dees, J. L. Tagore and America (*U.S.I.S.*).
Tagore, S. Rabindranath Tagore and Universal Humanism.

Visva-Bharati and Its Institutions (*Visva-Bharati*).
The Visva-Bharati Quarterly (Education Number), Vol. XIII, 1947.
Tagore, Rabindranath. Reminiscences (*Macmillan*).
Tagore, Rabindranath. My Boyhood Days (*Visva-Bharati*).
Tagore, Rabindranath. Creative Unity (*Macmillan*).
Tagore, Rabindranath. Personality (*Macmillan*).
Tagore, Rabindranath. The Parrot's Training: A Satire on Educational Methods (*Thacker Spink Co.*)
Tagore, Rabindranath. *Siksha* (in Bengali) (*Visva-Bharati*).

ON VIVEKANANDA

Rolland, Romain. The Life of Vivekananda and The Universal Gospel (*Advaita Ashrama, Calcutta*).
Swami Abhedananda. Swami Vivekananda and His Work in America.
Sister Nivedita. The Master As I Saw Him.
Reid, J. T. Bridges of Understanding (*U.S.I.S.*).
Swami Tejasananda. The Ramakrishna Movement: Its Ideal and Activities (*Belur Math*).
The Report of the Literary Workshop on the Educational Ideas of Swami Vivekananda (*Edited by Swami Lokeswarananda, Narendrapur, Calcutta*).
Swami Vivekananda. Education (*Mylapore, Madras*).
The Complete Works of Swami Vivekananda (*Advaita Asrama, Almora*).

ON GANDHI

Rolland, Romain. Mahatma Gandhi (*Publication Division, Government of India*).
Mazumdar, H. T. Mahatma Gandhi (*Scribner*).
Patel, M. S. The Educational Philosophy of Mahatma Gandhi (*Navajivan Publishing House*).
Kripalani, J. B. The Latest Fad (*Hindustani Talimi Sangha, Sevagram*).
Shrimali, K. L. The Wardha Scheme (*Vidya Bhawan Society, Udaipur*).
Zakir Hussain Committee Report on Basic National Education.
Radhakrishnan, S. Mahatma Gandhi (*George Allen & Unwin*).
Bose, N. K. Selections from Gandhi (*Navajivan Pub. House*).
Bhatia, H. R. What Basic Education Means (*Orient Longmans*).

Avinashilingam, T. S. Understanding Basic Education (*Ministry of Education, Govt. of India*).

Dubey, M. C. Basic Education and the New Social Order (*N.C.E.R.T., New Delhi*).

Basic Education: A Fresh Look (*N.C.E.R.T., New Delhi*).

Rao, V.K.R.V. Gandhian Values in Education (*Ministry of Education, Govt. of India*).

Gandhian Outlook and Techniques (*Ministry of Education, Govt. of India*).

Gandhi, M. K. Basic Education (*Navajivan Publishing House*).

Speeches and Writings of Mahatma Gandhi (*G. A. Natesan & Co., Madras*).

ON SRI AUROBINDO

Maitra, S. K. An Introduction to the Philosophy of Sri Aurobindo.

Bhattacharya, P. K. A Scheme of Education (*Sri Aurobindo Asram Press, Pondichery*).

Goswami, C. R. The Soul Culture in the Upanishad (*Sri Aurobindo Asram Press, Pondichery*).

Sri Aurobindo. A System of National Education (*Arya Publishing House*).

Sri Aurobindo. The Life Divine.

Sri Aurobindo. The Human Cycle.

Sri Aurobindo and the Mother. On Education.

ON RADHAKRISHNAN

Radhakrishnan, S. Indian Philosophy (Two Volumes).

Radhakrishnan, S. An Idealist View of Life (*Allen & Unwin*).

Radhakrishnan, S. The Hindu View of Life (*Allen & Unwin*).

Radhakrishnan, S. East and West in Religion (*Allen & Unwin*).

Radhakrishnan, S. Eastern Religions and Western Thought (*Allen & Unwin*).

Radhakrishnan, S. The Religion We Need (*Ernest Benn, London*).

Radhakrishnan, S. The Reign of Religion in Contemporary Thought (*Macmillan*).

Radhakrishnan, S. Freedom and Culture (*G. A. Natesan & Co., Madras*).

Radhakrishnan, S. Kalki or The Future of Civilization (*Kegan Paul & Co., London*).